

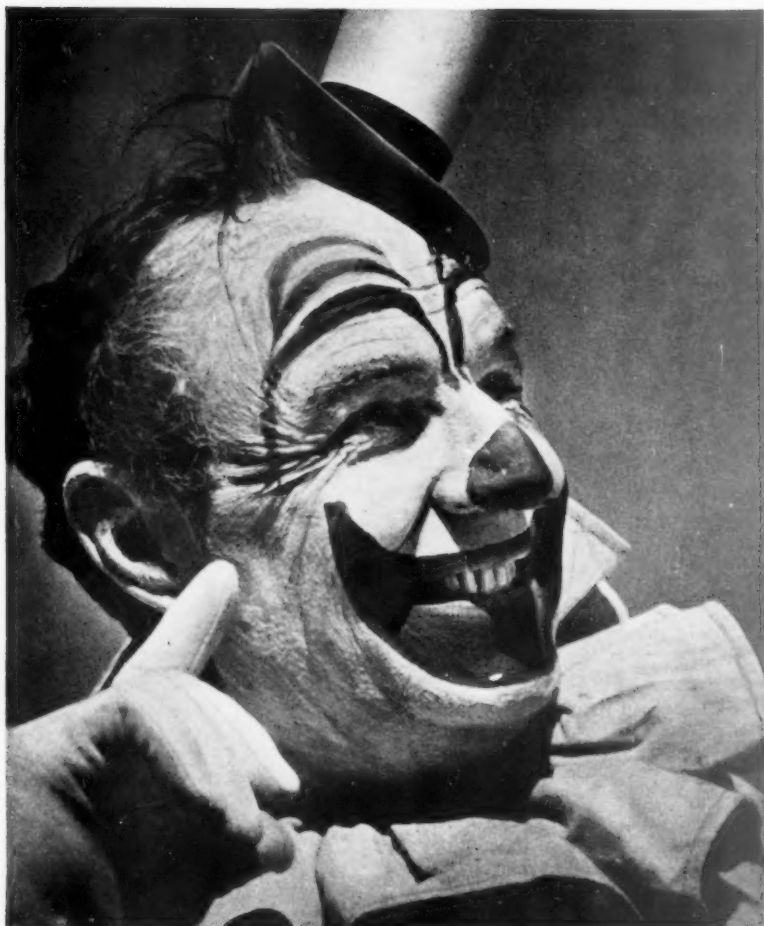
THE AUSTRALASIAN PHOTO-REVIEW

PUBLISHED BY

KODAK (AUSTRALASIA) PTY. LTD.

YEAR NINETEEN FIFTY-TWO

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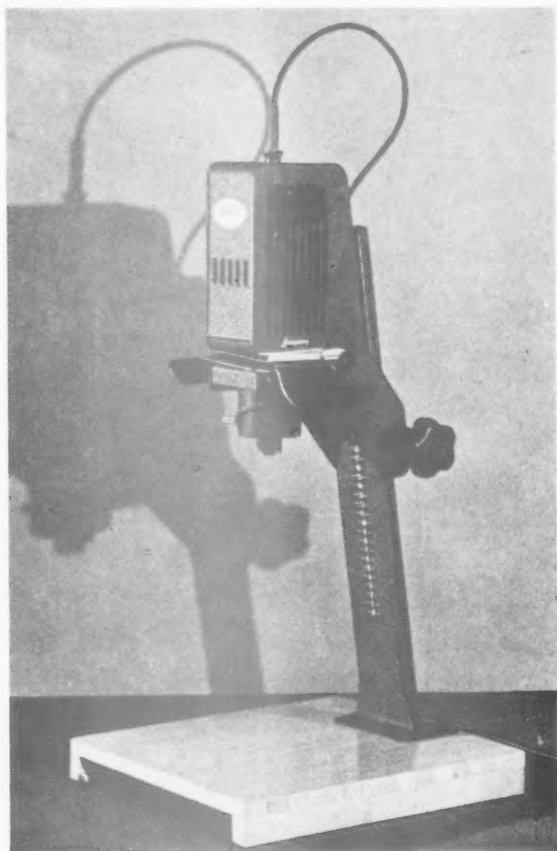
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Review of January Portfolio

From time to time I have emphasised in my monthly reviews the fact of how very often a portion of a subject can be of greater impact than can the whole. Now a comparison of the reproductions on the January cover and on the title page will bear me out in this remark. The close-up study brings out all the beauty of the feather markings and textures that might almost go unnoticed in a general print. Another point—in the close trim the interest is centred to best advantage without the eye jumping from one spot to another in the directions of various eye-catching highlights. Of course, I must add that the complete print would no doubt be of greater value from the wild life point of view.

In "An Album of Fauna," I find the introductory offering (B.F.N.'s "Noonday Siesta") a more than attractive print, the feline pair having been photographed at an angle that could not have been better. The long fall of empty space towards the bottom of the print, combined with the sloping shadows, helps very considerably to deepen this restful type of composition. In addition, the close trimming at top and sides represents a valuable element in controlling the centre of interest.

F.E.B.'s "Today and Tomorrow" is a print of unusual charm, one in which the highlights are successfully offset and enhanced by the almost flat low tone of the background. It was a wise trimming that allowed a certain amount of 'moving space' ahead of the ducks. That quiet, watchful eye of the mother duck is an amusing point in the print and one that contrasts nicely with the nonchalance of the younger generation. Finally, there is an excellent feeling of movement in this print—this indicates to me that clearly the right moment was selected for the exposure.

When A.F.D. sees the reproduction of "Doggone It!" he will, I imagine, feel agreeably surprised with the admirable reproduction of his print. Though the original was a prizewinner, it was editorially believed that much of the appeal of the subject was weakened by the inclusion of too much fence at the top and sides—this tended to dominate the principal topic of the escaping pups. Strange to say, on this occasion I do not object to the criss-cross foreground of grass, believing that its textures are necessary here to create a contrasting note with the almost flat tones of the remainder. In this picture also, the moment was exactly right for the clicking of the shutter.

Not a great deal can be said concerning E.J.B.'s "Long Shanks," apart from a very favourable reference to the quality of the submission as a whole. The lines of the stalk and of the insect, running as they do from corner to corner, form an arrangement that is the most obvious and at the same time the strongest. The sharpness of the rendering captures and holds our interest; although, personally, I often favour the off-sharp print, I must always remember to give full appreciation to the need for exacting sharpness of image when the subject calls for it—as it does on the present occasion. Very similar remarks apply to E.R.'s "Grasshopper." It is clear that this contributor possesses a keen interest in wild life, as is shown by his many fine studies, three being included in the present album. A point worthy of note here is the tonal scheme. Although it is fairly obvious that the background is an artificial one (probably of cardboard of suitable darkish tone), it is the degree of tone that appeals to me very strongly; it is one that

By KARRADJI

many competitors should seek to obtain by suitable choice of filter for many outdoor studies in which dramatisation and accentuation of highlights are desirable. In this instance, note how the strong highlights develop the feeling of brittle hardness in the covering of the insect. A valuable compositional point was the inclusion of the little portion of branch in the bottom-left corner.

G.S.H.'s "Old Solemn" is certainly an unusual presentation. Much of the present impact would have been lost had the picture been trimmed otherwise. A point that lends considerable strength to the title is the close trim to the left, this tending to increase the long-drawn, solemn look. The shadows are nicely handled, especially those on the shadow side of the face on the right. Here the darks completely separate the animal from the background and emphasise the left or detailed side of the face. Altogether a worthwhile addition to this enthusiastic worker's portfolio.

Only too often do we encounter very obvious examples demonstrating how little consideration was given by the photographer to the important matter of lighting control. That being so, I find it most refreshing to encounter an occasion like K.J.M.'s "Guess Who?"—one in which the lighting was used to real advantage. Here the highlights appear just where they are needed to bring into prominence the strong brows and the questioning eyes that are so much a feature of this study. Another point of interest is the slight degree of reflected light that helps so well to provide a feeling of roundness to the neck; in its absence, this area would have remained just a dark, uninteresting mass.

Of E.R.'s three prints, I think I like "Fox Cub" the best, and here again I consider that a better effect would have been gained by reducing the print to the basis of a portrait study; in any case, the softness of the body tends to be lost in the face of severe competition from the clean-cut features and the sharpness of the grass. Of course, when one is commenting on wild life pictures, one must always pause and give some appreciative degree of thought to the difficulties that are encountered in this type of photography, to say nothing of the long search for the subject and to the uncertainty as to how long any particular satisfactory pose will remain so before the camera. Only too often must these pictures be a matter for snap decisions; but all the same they represent interesting pictures that give enjoyment to multitudes.

"Caught Napping" (E.B.) is a very quaint study, and another that depends for its success on exposure at just the right moment. Beyond that, very skilful controlling measures have been adopted in order to reduce the 'pull' of the background and to give proper emphasis to the pattern of the animal's fur. In executing these control measures, the foreground was wisely left more or less alone with a view to adding to the feeling of perspective. Technically the print is excellent, especially as regards the rendition of the fur as I mentioned above.

E.J.B.'s "New Holland Honeyeater" must surely represent a study incorporating all the luck in the world; it is always difficult to obtain a natural life



The Photographic Societies

Club reports should normally be written to cover club events of the last twenty days of the previous month and those of the first ten days of the current month. They should always be written up immediately and posted so as to reach "The A.P.-R." not later than the 13th of the month before publication.

NEWCASTLE PHOTOGRAPHIC SOCIETY

"Marihuana," a low-key study of a young girl drug addict, won the Print of the Year award for Newcastle Society member, Ray Dillon.

Mr. Don Cameron, who judged the competition at the Society's Christmas night, praised the high technical standard of the thirty-five prints entered. He said that the subject matter selected revealed a changed outlook on the part of members. Many of the subjects had been carefully planned but, said Mr. Cameron, the authors had carried out the planning so well that many photographs had the appearance of lucky shots.

Second award went to Mr. Roy Manuel's "The Silken Shawl"—a high-key character study. Mr. Charles Collin gained third award with "Getting Ready"—a study of an oxy-welder about to light his torch.

Other annual awards went to A and B Grade point-score winners. W. H. McClung won the A Grade, with R. Gain runner-up. The late A. T. Ullman was third. J. Lillyman won the B Grade, with M. McNaughton second and W. Lyttle third.

Mr. Geoff. Garside, manager of the Newcastle Branch of Kodak Ltd., provided the entertainment with the screening of a feature film—Jack Buchanan in "This'll Make You Whistle."

During supper, the President (Mr. McClung) thanked members and officials for their support during the year, and wished them the compliments of the season. W.H.M.C.

Review of January Portfolio

Continued from page 68

picture with any reasonable degree of animation on the part of the 'sitter.' At the same time, I feel that a brighter print might have been possible. The photographer could hardly be expected to do anything about the diffused patch in the foreground, but attention might be directed towards the elements down the left margin that tend to scatter the interest.

L.G.C. was more than lucky in gaining his study of the Black-Faced Cuckoo-Shrike—the placing of the bird, its alert pose and the pleasant environment, aided by the small leafy branches, together form an arrangement that would be hard to beat. Apparently the judges recognised this and had little hesitation in awarding the print the First Prize.

The A.P.-R. is to be commended for once again conducting a Gadget issue, a feature which I imagine will attract a great deal of attention. I also notice that Gadget evenings are occasionally held amongst the various camera groups (Campsie, for one), and certainly this is something to be encouraged. Evenings when members can proudly show and demonstrate their handiwork must always stimulate interest.

CAMERA CLUB OF SYDNEY

(Incorporating The Miniature Camera Group)

The scheduled competition, "Architecture or Sculpture," attracted a large and varied selection of prints on the evening of Tuesday, 18th December, and provided for the judges, Mr. J. M. Galbraith, Mr. P. B. Billings, and Mr. Lyndon Dadswell, a rather difficult task in evaluating the entries. Their decisions resulted in the following awards:

A Grade—1, M. G. Wilson; 2, M. Wright; 3, M. G. Wilson; HC, K. D. Hastings.

B Grade—1, B. L. Gibbons; 2, L. Friend; 3, B. L. Gibbons and G. W. Gardiner (equal).

The two guest judges, namely Messrs. P. B. Billings and Lyndon Dadswell, are each well known in their respective fields; Mr. Billings being a Past-President of Wellington Camera Club (New Zealand), and Mr. Dadswell being a sculptor of repute.

Later, Mr. Dadswell volunteered to give members an insight into third-dimensional art expression. He spoke on subject matter, composition, texture and technique, and further elaborated by discussing such things as Free versus Solid compositions and the aspect of the object, suggesting that one needs to walk about a sculpture and view it from all angles.

Mr. Billings followed on with a short talk giving details of the operation and activities of the Wellington Camera Club; this proved both entertaining and interesting.

The history of the club, its connections, activities, etc., were received with avid interest and, beside learning more about our sister dominion, we profited by certain suggestions that should materially aid us in our drive for membership and for our own premises which, with good fortune, we should be able to attain in the not too distant future. M.G.W.

BOYNE VALLEY CAMERA CLUB

The month of November featured much in our club activities. Of special note was the excursion to Tannum Beach, Gladstone's seaside resort. On arrival there, we were at once attracted by the beautiful beach, where photography was lost for a few hours. However, as the afternoon advanced, the atmosphere and lighting conditions gave more opportunities for pictorial work.

At the meeting held on 30th November, it was decided to purchase a 24" x 34" enlarger for the club. S.G.B.

THE WAIKATO PHOTOGRAPHIC SOCIETY

Elected to office in the Waikato Photographic Society for the ensuing twelve months were: *Patron*, Mr. H. D. Caro; *President*, Mr. B. A. L. Desgranges; *Vice-President*, Mr. A. L. Fow; *Secretary-Treasurer*, Mr. R. W. Cooper; *Editor*, Mrs. Irene A. Cooper; *Committee*, Mrs. M. F. Desgranges, Messrs. R. C. Gaylard, H. A. Kinzett, H. A. Larsen, R. M. Moran, F. E. Morris, T. R. Peterson, and R. F. Swarbrick.

Some 300 prints—about half the number entered into club competitions during the year—were shown in the Annual Exhibition, giving satisfactory evidence of improvement in individual members' work over the period.

Awards went to:

Lorimer Cup (for Senior Aggregate Points), Mrs. M. E. Desgranges; *Hunt Cup* (for Senior Champion Print), Mrs. M. E. Desgranges; *Larsen Cup* (for Junior Aggregate Points), A. L. Fow; *Moran Cup* (for Junior Champion Print), Mrs. D. H. Larsen; *Smith and James Trophy* (for Most Original Print), Miss Kay L. Cooper; *Rice Trophy* (for Best Portrait), Chas. Davenport;

Gaylard Cup (for Colour Slide Aggregate Points), Mrs. M. E. Desgranges; *Cooper Cup* (for Champion Colour Slide), B. A. L. Desgranges.

A Refresher Course series is being featured at the first meeting of each month, Mr. B. A. L. Desgranges having already lectured on the use of lighting to bring out form and texture, and how to produce better pictures by making use of shadows. Mr. R. W. Cooper has pointed out the value of using pattern, and has also given a lecture on how to make more storytelling pictures by the use of different camera angles. Mr. R. Tizzard, member of the Rutland Art Group, has spoken on Picture Management.

The second meeting of the month proved equally instructive and enjoyable. Colour slides were screened on several occasions; slides entered into club competitions, a series made by Mr. T. R. Paterson during a South Island tour, and slides from the New Zealand Inter-Club Competition for the Wiltshire Cup for 1950.

Portrait lighting was demonstrated by Mr. B. A. L. Desgranges, and another time Mr. H. A. Larsen gave an interesting talk on the Photographic Societies of Australia, some of which he visited during his recent visit to that country. An evening when members showed off their pet gadgets was very much enjoyed. Mr. R. W. Cooper, at another meeting, explained the principles of the photo-finish camera, and demonstrated the special technique, aided by his usual working assistant Mr. R. C. Gaylard.

A very special occasion saw Mr. Jack Lesnie, well-known Auckland professional, giving a full-scale demonstration of lighting for glamour portraits—his chief model, a glamorous blonde, was very much photographed by the large attendance of members that evening.

Recently, members brought along their cameras again and had fun photographing still life and amusing table-tops. While this went on upstairs, small groups were being taught print-finishing downstairs in the club darkroom.

Beginners' classes, given in the club darkroom every month, have been very successful. So far these new workers have been instructed how to develop their own films, make contact prints, and make (from simple to controlled) enlargements, the tutors being Messrs. R. W. Cooper, T. R. Paterson, H. S. Kinzett, and H. A. Larsen.

Exhibitions enjoyed to date have been the 7th New Zealand International Salon, the 1950 Wiltshire Colour

Slide Interclub Competition, the 1950 Inter-Club Competition for the Bledisloe Cup (won by the Waikato Photographic Society), the same competition for 1951 (in which the Auckland Camera Club took first place), and the prints entered into the 1950 National Competition for the Kiwi Challenge Cup (won by Mr. H. A. Larsen, runner-up Irene A. Cooper). The Interclub Postal Portfolio has been received, enjoyed, commented on and, with our contributions, sent on to the next club.

That members are working well again this year is shown by the average of over eighty prints a month entered into the club competitions, with the standard of work improving all the time. An Intermediate class for monochrome was introduced at the beginning of the year, the most prolific workers being found in this group.

Juniors are credited with all marks given their prints. When they have submitted four prints marking 70 or over, they become Intermediates, and their work must gain 65 marks to be credited. Four prints marking 80 or over promote them to the Senior class, where 75 points are the minimum for crediting to their aggregate for the year. This grading is working out very well.

There is still only one class in colour. In recent competitions several new workers in this medium have entered slides, and it is hoped their numbers will increase still more. I.A.C.

HEALESVILLE (VIC.) CAMERA CLUB

Location of the December outing was Lake Yumbunga, at which members secured some delightful water studies under ideal weather conditions. The subject for next outing is "Night Photography," and it is hoped to include camp-fire scenes (per barbecue) as well as building and street shots in the town.

The club intends holding its first Annual Club and Invitation Exhibition early in March. As it is desired to make this a really successful show, an invitation is extended to clubs and individual photographers to participate in the display. Prints should reach the H.C.C. Secretary (F. J. Roberts) not later than February 29th. Exhibitors are assured that every care will be taken with their prints and postage will be paid both ways by H.C.C.

Residents in Sydney may deposit their entries at *The A.P.-R.* Editorial Office, 1st Floor, 386 George Street, for forwarding in bulk on Feb. 21st. F.J.R.

Group photograph made during the combined outing of the Healesville Camera Club with the Photographic Society of Victoria and the Preston Photographic Club held recently at Healesville.





THROUGH THE YEARS F. E. Bennett

Vol. 59 FEBRUARY 1952 No. 2

THE AUSTRALASIAN *Photo-Review*

Editor: KEAST BURKE, A.R.P.S., A.P.S.A., Hon. Rep. P.S.A.

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Preview of Mar. & April

James Fitzpatrick will tell us of one of his most interesting assignments—his documentary coverage of the little Shakespeare-minded Gippsland town of Stratford-on-Avon.

Quentin Burke will write an autobiography of Charles Kerry, the noted photographer of the Australian scene from the eighties onwards.

Beryl Miles pens a lively account of the visit of the E. G. Dunkin expedition to a cave on the Roper River, famous for its aboriginal rock-paintings.

The technical side will be covered by the reprinting of the famous 'Johnny Appleseed' series from the 'Journal of the Photographic Society of America.'

Portfolios will include 'Clouds' and 'Hands.'

There has been a generous response to the Editorial request for manuscripts, but remember—the magazine's needs in this direction are never-ending . . .

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How To . . .

No. 1: Tank Development

Film developing is probably the least understood and most troublesome of all steps in photography. It causes more trouble to beginners than all other problems put together.

Certain agitation precautions are necessary in developing film in daylight tanks when the film is wound on spiral reels. These precautions avoid such troubles as air bells and development streaks of various types.

Be sure to load the film into the spiral reel so that it does not touch itself. That is, make sure that the film lies in the concentric spiral channels of the reel. There will be no development at points where the film touches itself. Practicing in white light with scrap film is a good idea. The beginner will do well at first to use an orthochromatic film, like Verichrome, which can be handled in the light of a Series 2 safelight. This safelight provides enough illumination so that you can see what you are doing. Do not use the Series 2 for panchromatic films, though.

Better results are obtained by lowering the loaded reel into the developer than by pouring the developer on the film after placing the reel into the empty tank. For this reason, the tank should be filled with developer before the reel is loaded with film.

By JOHNNY APPLESEED*

Immediately after dropping the reel into the developer, give the tank a few sharp taps or shakes to dislodge air bubbles from the emulsion surface. If this is not done, small transparent spots (air bells) will result and these will give black spots in your prints.

Place the cover on the tank and if you wish, turn on the room lights. Start the timer.

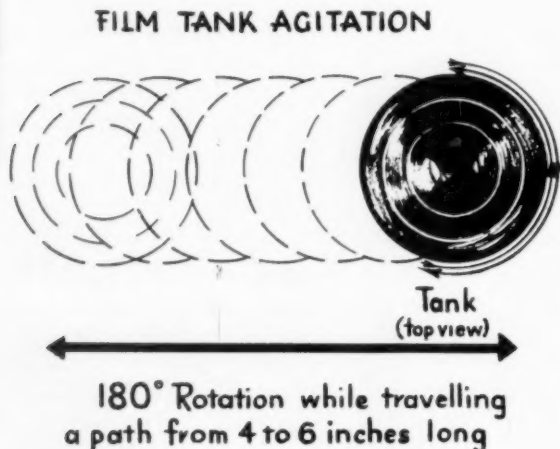
The *type of agitation* which you will give controls the evenness of development from place to place in the roll. No agitation usually gives cross bars on the film and may result in halos around the areas of high density. Circular or swirling agitation sometimes gives streaks in the lengthwise dimension of the film. Cocktail shaker agitation gives high densities along the film edges.

To avoid these troubles, agitate as follows for the first half of the development cycle:

For fast working developers (development is complete in 5 to 8 minutes).

Each 30 seconds move the tank briskly in the one operation, 4 to 6 inches across the table while rotating it about 180° as shown in the diagram. Move the tank in opposite directions on alternate agitations. After the first half of the development period, continue to agitate as before, but reduce the frequency of agitation to once every 1 or 2 minutes.

*Reprinted by permission from the Journal of the Photographic Society of America.



For best results, agitate as shown
(NOTE: One twist, one four-inch movement.)

For slow-working developers (development is complete in 10 to 20 minutes).

Each minute move the tank briskly 4 to 6 inches across the table while rotating it about 180° as shown in the diagram. Move the tank in opposite directions on alternate agitations. After the first half of the development period continue to agitate as before, but reduce the frequency of agitation to once every 2 to 4 minutes.

The amount of agitation which you give will control your negative contrast to some extent. Frequent agitation gives high contrast, infrequent gives lower contrast. These contrast differences are noticeable mostly as the amount of silver developed in highlight portions of negatives. The importance of this effect, in terms of print quality will be discussed in a future "How To" column.

Be sure to give adequate agitation during fixing, particularly at the beginning. Follow the same pattern as for development agitation.

No. 2: Development of Sheet Film

Development of sheet films is best done in a tray, as far as evenness of development is concerned. On the other hand, this technique is not always feasible and many photographers prefer to use an open developing tank with film hangers.

Good sheet film development is of undisputed value in making good prints. Too little agitation in a tank is likely to produce negatives with a mottled or blotchy appearance in areas of uniform density. Too much agitation can result in streaks, particularly

along the edges. Any old hit-and-miss type of agitation will give development but there is a method to agitate which will minimize troubles. Here is a good way to agitate sheet film in an open tank with film hangers.

Lower the hangers as a group smoothly and carefully into the developer. Immediately tap the hangers on top of the tank several times. This will shake off air bubbles on the surface of the film and will prevent clear spots (air bells) in the developed negatives. Then separate the hangers from each other so as to leave at least $\frac{1}{2}$ -inch between each hanger and between the end hanger and the tank. This spacing is very important and leads to the next recommendation.

Never overload—determine how many sheets your own tank will hold by making a trial loading in daylight with empty hangers. The width of most index fingers is $\frac{1}{2}$ -inch. The index finger serves as an easy way to estimate the $\frac{1}{2}$ -inch spacing in the dark. It is also possible to notch the tops of some tanks. If film is spaced closer than $\frac{1}{2}$ -inch, you may get into trouble with uneven development or from sticking of adjacent sheets to each other.

For High Activity Developers, such as DK-50, DK-60a, etc.

After tapping off air bubbles, allow the hangers to remain undisturbed for one minute. Then go through the following four steps quickly and smoothly, as shown in the accompanying illustration.

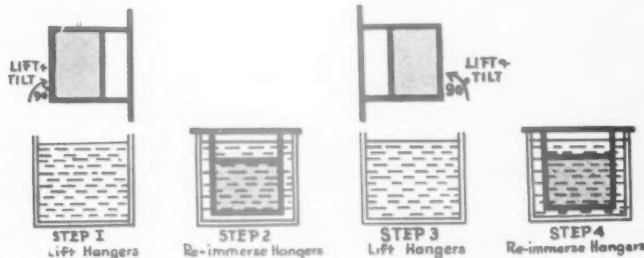
Step 1—Lift the hangers out of the solution, quickly tipping them 90° to the right.

Step 2—Immediately re-dip them.

Step 3—Again lift them out of the solution, this time quickly tipping them 90° to the left.

AGITATION OF SHEET FILM DURING TANK DEVELOPMENT

The four steps for correct agitation of sheet film



Step 4—Re-immerses them and separate the hangers so that they are again spaced $\frac{1}{2}$ -inch apart.

Repeat this cycle after each successive minute of development.

For Low Activity Developers, such as D-76, Microdol, etc.

Tap off air bubbles and agitate as above, except reduce the frequency of the cycle to once every two minutes after development has progressed to about half (6 to 7 minutes) of the full development cycle.

One of the secrets of success for this 4 step procedure is the quick 90° tipping of the hangers. When the hanger is tipped sideways before the developer has a chance to drip from the film, there is a flushing action which rapidly removes developer by-products from the emulsion surface. By tipping first to the right, immersing and tipping to the left, the development restraint provided by these by-products is distributed in many directions, thus minimizing their effect in local areas of the negative. Both amateurs and professionals have found that this procedure gives uniform development of such difficult subjects as high key scenes and those with large areas of medium density.

Handle each hanger carefully so as to avoid digging into the remaining films.

After you have finished developing the film, lift the hangers from the developer and drain for about 3 seconds. Then transfer to the rinse water or stop bath. Lift and re-immerses the hangers in the rinse or stop bath 5 or 6 times and drain them for about 5 seconds before immersing them in the fixing bath.

Agitate the hangers vertically for about 10 seconds after immersing them in the fixing bath. Do this again after each minute of fixation. Agitation is necessary immediately after immersion in the fix to remove the air bubbles. Further agitation guarantees uniform fixing and speeds up the rate.

There is a right and a wrong way to do everything. I believe that this is the best known way for processing sheet film in an open tank.

No. 3: Print Glazing

There are two print finishing techniques which give apparently richer blacks, more

detail especially in the shadows, and an increased density range. These techniques are print-glazing and waxing or lacquering. Ferrotyping and waxing do so much to improve print quality, to give that excellent rich appearance characteristic of a print in the wash water, that you can't afford to pass them up. Print waxing will be discussed in a future column.

Print-glazing can be accomplished only with glossy surface paper and also *it is easier to get good, consistent results with single weight paper than with double weight.* Here's a step by step method for ferrotyping glossy prints.

Preparing the Stainless Steel Plates

Any new glazing plate as received from the store, or old ones giving bad results, should be washed thoroughly with a good quality mild soap and hot water, using a cotton swab and observing precautions to prevent scratching. Any scratches present on the original plate surface will be reproduced on the prints to be dried on it later. Exercise great care in storing plates to prevent scratching their glossy surfaces.

After the plate has been washed, rinse off the soap and dry it. Then wax it with a solution made by dissolving a piece of paraffin wax the size of a large pea in four ounces of carbon tetrachloride. The fumes from this chemical are somewhat poisonous, so do not breathe them longer than absolutely necessary. Use the wax solution sparingly, applying it uniformly with circular motions to the plate surface with a wad of cotton. As soon as the wax is dry of carbon tetrachloride, polish completely and carefully with two or three wads of fresh cotton or a clean, soft cloth. Be sure to remove all excess wax. The first prints to be processed after waxing are usually not as glossy as those obtained after the plates have been used a few times.

Repolishing the plates is required infrequently if they are properly cared for. Each time before using the plates, wash them *thoroughly* with warm water and a wad of cotton (*no soap*); then flush them off with hot water from a hose or tap, followed by cold water just preceding application of prints to the plates. If water stands on the plate in well-defined puddles (rather than wetting it uniformly) you can be sure the plate surface is good for glazing.

Preparing Chrome-Plated Plates for Glazing

New chromium plates and dirty old ones should be cleaned with Bon Ami, polished carefully to remove all abrasive, and then waxed by the above procedure for stainless steel plates. Chromium plates need repolishing more frequently than stainless steel plates. The puddle test applies, as before.

Fixing

Use an acid hypo (such as F-5) for the fixing bath, in order to assure gelatin characteristics suitable for glazing.

Washing the Prints

In order to get good ferrotyping, the prints must be washed in water that is cold enough to prevent the gelatin from softening unduly. This usually requires temperatures below 80°. Do not prolong the washing, since under most conditions hypo is removed by circulating water for about $\frac{1}{2}$ to 1 hour, and soaking beyond 1 hour is likely to give bad results from softened gelatin.

Be sure the wash water is clean and does not contain sediment. *Do not use wetting agents on prints to be ferrotyped*—wetting agents cause sticking and make frequent repolishing necessary.

Placing the Print on the Ferrotypes Plate

Both the plate and the print must be thoroughly wet. Puddles of water should stand on the plate where prints are to be placed. On removing the print from the water, rinse the emulsion surface with running water from a tap to remove small granules of sediment or particles of dust which are likely to be picked up from the water surface when the print is removed from the water. Immediately place the wet print, image side down, on the *wet* plate in the position desired for ferrotyping.

Squeegeeing

Cover the prints with a white photographic blotter and roll them flat with a print roller, as shown in the accompanying illustration. Intimate contact between the prints and the plate is absolutely necessary for good results. *Where large prints are being ferrotyped, be sure that the blotter and the roller are larger than the print, so that uniform squeegeeing can be obtained.*

Drying

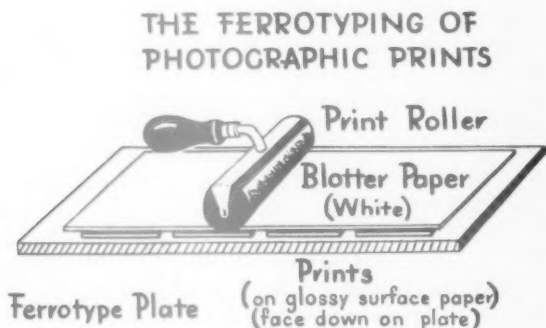
It is advisable to regulate the drying so as to be completed in not less than about 3 hours and not more than about 12 hours (or over night). Too fast drying causes print surface defects, while too slow drying sometimes encourages sticking of prints to the plate. In general, slow drying gives glossier prints than rapid drying, other factors being equal. An easy way to control the rate of drying is to cover the prints with dry photographic blotters after squeegeeing. Or, if your wife will permit, lay the plates face down on the living room rug. *Do not pick the prints from the plate.* This usually causes small dull spots on the prints and may result in tearing the image from the paper and leaving it behind on the plate. If the prints do not fall off readily after the paper is *entirely* dry, flex the plates *slightly* to encourage their falling off, or remove the blotter paper after 3 to 4 hours. Don't attempt forced drying with heat or fan until after the first three hours and then only when absolutely necessary and with moderation.

Troubles.

The following are a few of the most common print-glazing troubles, what usually causes them, and what to do when you face them.

(Concluded on page 93)

The ferrotyping of glossy prints



Tree Studies by Night

From the earliest times trees have been a prominent feature in the life of man, and it was therefore natural that they were represented in his first attempts at the graphic arts. Photographers also since the days of the pioneers have turned for pictures to the trees, which have always been popular subjects for the camera. One of the charms of deciduous trees is the infinite variety of appeal which they display during the different phases of their annual life rhythm. Of all the seasons, winter is perhaps the best for making photographic tree studies. When the leaves fall the full beauty of form of the deciduous tree is revealed and the gaunt limbs and delicate tracery of branches may be portrayed in a manner which is impossible in summer.

Although the vast majority of tree studies is made by daylight, there is no reason why this branch of photography should be confined to the daytime only. In fact, striking tree studies may be made at night by using the normal street lighting, of whatever type it may be, as the illuminant. The improvement in street lighting during the last few years has made more subjects readily available, and although many trees have unfortunately been felled they are still a feature of most towns. Trees which are to form the subject of studies by night will obviously have to be near a well-lit road, but it should not be necessary to go far afield in search of suitable ones. Some may be found in the thoroughfare itself, but in addition public parks and private gardens provide other sources of inspiration. The chief difficulty will be isolating the subject from distracting elements, particularly in the background. This problem can sometimes be solved by choosing a foggy or misty night on which to make the photographs. The mist will simplify the composition and subdue or even completely obliterate the distracting background. A further point in favour of a foggy night is that there is usually no wind, and a still night is obviously desirable when time exposures have to be given.

Tree studies made at night are best when they merely portray a silhouette of the sub-

By A. RUDDLE

ject. Studies of part of a tree, showing the texture of the trunks, and pictures of a similar type, can be made much more easily and effectively by daylight. At night it is better to use the form of the tree as a means of exploiting unfamiliar or striking lighting effects. The pictures will then be obvious night studies and there will be no confusion as to the source of the light. To produce silhouettes there must, of course, be back-lighting, and the most effective pictures are are those in which a tree is placed so as to hide the actual illuminant. Where there are several trees included, an effective arrangement is to screen the light behind the tree nearest to the camera. This will then print as the darkest area in the picture. Any atmospheric mist that may be present will then cause more distant trees to show in lighter tones, thus giving an impression of depth.

Exposures naturally vary considerably, depending on the type of street lighting and the variable factors, such as the distance of the subject from the source of light and the amount of detail required in the shadow portion of the picture. In actual practice it will be found that, thanks to the quality of modern emulsions, there is considerable latitude in exposure provided that more than the minimum necessary to render the required shadow detail is given, and that over-development of the negative is avoided. The latter proviso is important. Over-development of the negative will lead to blocked-up highlights which will not print through, and the contrast of the negative will be so excessive that it will be impossible to produce a satisfactory print on the softest grade of paper. In common with most outdoor night subjects, the brightness-range of the subject, from the brightest highlight to the deepest shadow, is extreme. This wide range of tones in the subject-matter must be compressed in the negative material otherwise the result will be a negative which is quite unprintable.

(Concluded on page 93)



C. S. Christian AUSTRALIAN LANDSCAPE

An Album of

TREE STUDIES
AND SOME LANDSCAPES

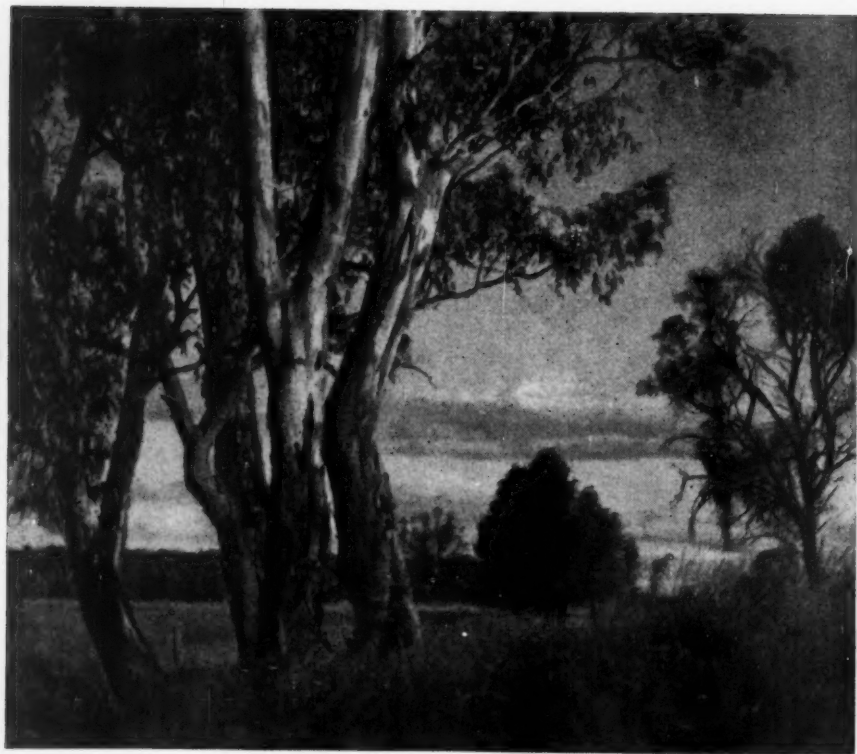


W. A. Jessop HANSEL AND GRETEL

W. A. Jessop MONARO HOMESTEAD



D. M. Strout GUMS, JACKSON





A. C. Redpath SUNLIT TREES

A. G. Gray MISTY MORNING





G. S. Harrison MIDWINTER

K. M. Walker THREE SISTERS





L. J. Dundon SUNLIT PINES

D. M. Strout SUNNY MORNING





A. L. Gooch BLUE GUMS



C. S. Christian WYNDHAM LANDSCAPE

R. Henning OLD FIGS



O. Truchanas DEATH VALLEY





I. H. Caldwell ROCK BOUND



G. S. Harrison CHIMNEY PIECE

How To . . . *Continued from page 75*

1. *Sticking* of prints to plates can be caused by any or all of the following: Use of exhausted hypo, use of hypo weak in hardener and acid, too long washing, washing in warm water, dirty plates, too slow drying, or wetting agents. Solution: Soak prints off the plate, harden them by refixing in fresh hypo for 5 minutes, wash the prints in running water for 30 minutes (in this case water at 100-120°F. is necessary), re-glaze on a clean, well-polished plate, dry in about 3-12 hours.

2. *Oyster shell*. This defect appears as radiating semi-circular bands of variable gloss in patterns like those on the outer surface of an oyster shell. It is caused by too rapid drying. Prints with oyster shell are unattractive. Solution: Make new prints, drying more slowly.

3. *Spots* can be caused by specks of dirt (on the plate or on the paper surface) which prevent intimate contact, or from pulling the incompletely dried print from the plate.

Solution: Dirt specks on the prints and plates can be avoided by meticulously washing both before contact. Prints with dirt specks cannot usually be referotyped successfully.

4. *Too little gloss*. This is caused by removing the print before it is entirely dry, using plates with improperly polished surfaces (including too much wax), using too much hardener in the hypo, ferrotyping prints which have once been dried without ferrotyping, or by trying to ferrotype paper not especially designed for the purpose. Solution: Start over again, following the correct procedure carefully. Don't pull the prints off the plate.

5. *Edge lifting*. This is caused by too rapid drying or by gelatin that is too hard. Solution: Take steps to slow the drying if it is known to have been fast, or soak prints for a prolonged time—even to the extent of using water hotter than 80°. Prints can also be soaked in a print flattener solution.

Tree Studies by Night *Continued from page 76*

From about a half to two-thirds of the normal development time should therefore be given to the plate or film, depending on the type of illuminant to be used in the enlarger. This reduced development time should produce a thin negative capable of giving a print with well-graded highlights on a normal grade of paper.

Two essential requirements are a lens hood and a tripod. There are often street

lamps or other lights beyond the boundaries of the picture area and the lens hood should prevent stray light from such sources reaching the lens and degrading the negative. A ball-and-socket head is a useful adjunct to the tripod.

Look out for suitable subjects in your own town wherever a tree or a group of trees may be found in the vicinity of a well-lighted road or street. (*Amateur Photographer*, October 17, 1951)

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Photo-progress in 1951*

In 1951, the first year of the latter half of the twentieth century, an ever-expanding use of photography was noted in many fields of endeavour. More colour photographs were being made by both amateur and professional than theretofore. A wide variety of equipment of both domestic and foreign manufacture was available in limited supply. Industrial, military, documentary and scientific photography showed steady growth over previous years. Although the motion-picture industry appeared to be undergoing a period of retrenchment, rapid strides were evident in the use of photography in television. Steady progress was reported in the application of photography to nuclear physics.

Amateur Still Photography

In the United States, a new miniature camera, equipped with a behind-the-lens shutter, had a superimposed-image type of rangefinder with a large eye-piece to accommodate the wearers of spectacles. Another model camera was introduced with a specially designed, removable shutter-lens for close-up photography. The Kodak Signet Camera replaced the Kodak 35 Camera and featured an Ektar 44mm. $f/3.5$ coated lens and a Synchro 300 shutter, the latter with four speeds from $1/25$ to $1/300$ th of a second.

In England, a new 24 x 36mm. precision camera was announced as having advantages not previously brought together in any one such instrument. In addition to a coupled-film transport, shutter wind and exposure counter, it included a combined rangefinder and viewfinder, removable back and full synchronization for electronic flash and for conventional flash up to $1/1000$ of a second. Another interesting British miniature camera was that in which the film passed along the front inside surface of the camera, under the rear element of the lens. Two mirrors brought the image onto the film.

*Reprinted by permission from *Americana Annual*, 1952, Year-book of the *Encyclopedia Americana*. The original article has been condensed by the omission of certain paragraphs relating to specialised equipment of U.S. origin. These paragraphs may be inspected at the Editorial office.

**Technical Research Editor, Kodak Research Laboratories, Rochester 4, N.Y.

By GLENN E. MATTHEWS**
and WILLIAM F. WALKER

The misapprehension that all German cameras are in the upper price brackets was being steadily discounted. The German American Trade Promotion Company revealed that 52 per cent of all German camera production involved fixed-focus cameras, whereas cameras selling higher than 70 dollars represented only 8 per cent of manufacture; about 200,000 cameras were produced each month, 8,000 of which were of reflex type, 15,000 of 24 x 36mm. design; and about 50 per cent of all German production was exported. The Kodak Retina IIa Camera was made in Stuttgart and featured: a Schneider Xenon $f/2.0$ lens; Synchro-Compur Shutter with speeds to $1/500$ second; coupled, superimposed-image type rangefinder; thumb-lever, rapid-film advance; and automatic shutter cocking.

Interest in the Japanese Nikon 24 x 36mm. Camera and Nikkor lenses was heightened by favourable reports from *Life Magazine* photographers covering the Korean fighting. In appearance the Nikon Camera was not unlike the Contax but included important features of the Leica and the Contax as well as some innovations of its own. The Nikkor lenses were of four focal lengths; 50mm. $f/1.4$, $f/2$, and $f/3.5$; 85mm. $f/2$; 135mm. $f/3.5$; and 35mm. $f/3.5$ wide-angle.

A convenient reference to the cameras being sold in Europe was published by *Photo-Technik und Wirtschaft* (2:192, May 1951) in the form of a list of the cameras exhibited at the Cologne (Germany) Exposition.

One of the major developments in photographic accessories was the battery-condenser (B-C) equipment for flash photography. Originally announced in 1949, the combination of battery and condenser can replace conventional dry cells as a source of energy

**UNUSUAL MILITARY
PHOTOGRAPHS**

An F-86 Sabre jet firing
a rocket while flying
about 300 miles per hour.
Note ground detail despite
12,000 feet altitude.
Made with a Kodak
Medalist.

*Credit: Courtesy United
States Air Force, Head-
quarters, Air Training
Command, Scott Air Field,
Illinois.*



Rare phenomenon of
two fire rings from guns
of cruiser, U.S.S. 'Man-
chester,' during naval
bombardment of Korean
coast.

*Credit: U.S. Navy Photo-
graph; courtesy U.S.
Camera Magazine.*



New York City from
Atlantic Highlands, New
Jersey. Range 26 miles.
Photo. on infra-red plate
made with Zeiss FK-3M
camera. Lens focal
length—3 meters; ex-
posure—1/3 sec. at f. 25.

*Credit: Courtesy E. K.
Kaprelian, U.S. Signal
Corps Engineering Labora-
tories.*



for firing flash bulbs. In 1951 battery-condenser flash units were being manufactured by at least twelve companies for use on almost any type of amateur or professional still camera. For example, the new Kodak Ektalux Flashholder utilized the B-C system, and could be used on standard cameras, press cameras, or Polaroid-Land cameras; also, it could be adapted to many existing solenoid synchronizers by means of adapters especially made for the purpose.

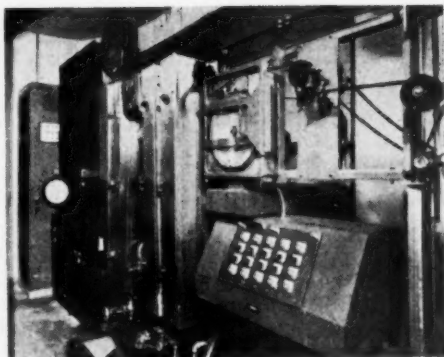
A popular lens for press-type cameras, the Kodak Ektar 101mm. $f/4.5$ lens, was made available mounted in the Kodak Synchro-Rapid 800 Shutter for use on any $2\frac{1}{4} \times 3\frac{1}{4}$ camera taking interchangeable lenses.

Among new German lenses, the Schneider Xenon 50mm. $f/1.9$ and the Schneider Xenar 135mm. $f/4.7$ in an internally synchronized Compur-Rapid Shutter were announced. The 50mm. lens included a pre-selector that allows focusing and composing at maximum aperture, following which the diaphragm can be closed down to a previously selected aperture setting. This stop pre-selector was also added to Xenon $f/1.9$ and $f/2$ lenses for the Kine Exakta Camera and Sonnar $f/2.8$ and Zeiss $f/4$ lenses. (*Phot. (London)*, 6:32, May, 1951).

A new Dutch telephoto lens, the Fototel, was a 450mm. $f/5.6$ lens of novel design that consisted of a spherical concave surface mirror, and achromatic surface mirror and a convex surface mirror on the front lens element. (*Phot. Trade News*, 14:62, June, 1951).

At least two new 2×2 slide projectors appeared worthy of note. The Kodaslide Merit Projector featured a vertical slide feeding mechanism. The Port-A-View slide viewer for 35mm films was said to be the smallest film viewer of its type available. A self-contained unit of the table viewer type, the Port-A-View was made up of a light source, slide changer, optical system, and six-inch square screen.

The Polaroid Company announced a new film, Type 420, which produced positive



PARAMOUNT INTERFILM THEATRE TELEVISION EQUIPMENT

Left to Right: High Definition Monitor with tube; recording unit consisting of a camera with 12,000ft. film magazine and sound recorder; high-speed spray processing unit with turbulent air dryer, producing completely dry film in about 25 seconds, ready for theatre projection.

Credit: Paramount Pictures Corporation.



AERIAL PHOTOGRAPHS TAKEN BEFORE INCHON, KOREA, INVASION LANDING

Vertical of Blue Beach. The sea wall (R.) is about 1,775 feet long. Forward oblique of Blue Beach sea wall on August 31, 1950, with tide out. Used to estimate height of sea wall prior to invasion of September 15, 1950.

Credit: U.S. Air Force Photo Reconnaissance Laboratory.

transparencies instead of paper prints. Intended for use in the Polaroid-Land camera, the film was said to have an exposure index to daylight of 100.

The manufacture of photo-sensitive materials as usual had its problems. H. R. Sprentall published a paper concerning the evaluation of film quality in which he examined the factors that affect the quality of a negative as produced by the photographer, all the way from the manufacturers' considerations of latitude and consistency to the individuals' exposing and processing techniques. (*PSA Journal*, 17:459, July, 1951).

The Korean fighting and the requirements of the national defence programme led to the renewal of the World War II request that photo-finishers make an effort to return empty film spools to the manufacturers. Furthermore, because of the metal shortage, it was necessary, in some cases, to develop substitute materials for packing films that formerly were enclosed in heat-sealed metal foil. Improvements in the domestic packing of sensitized materials, however, obviated the necessity of tropical packing of many photographic products. Radioactive particles from nuclear explosions in Nevada early in the year resulted in "hot" snow over many parts of the country which, in turn, caused photographic manufacturers to inspect their raw materials for possible contamination.

Amateur Motion-Picture Photography

Motion-picture enthusiasts were able to choose from a variety of new equipment. The Brownie Movie Camera was an inexpensive 8mm. roll-loading camera intended to bring movie-making to people who previously could not afford it. The camera was equipped with a Cine-Ektanon 13mm. *f*/2.7 Luminized Lens; a moulded plastic circular disc with Waterhouse-type stops in place of an iris diaphragm; and a single shutter (16 frames per second) that also functioned as a governor.

In the article entitled "The Laboratory of Today with Tomorrow's Design" (*Ideal Kinema* (Supp. to 17:4, *Kinematograph Weekly*), July 5, 1951), R. H. Cricks described the Debie Multiplex daylight developing machine for large scale processing of motion-picture film. This equipment was installed in

London (England) laboratories of Associated British Pathé. The same author in the June 28 issue of the magazine described the "Spray Master" motion-picture developing machine installed at the M.G.M. British laboratories in London.

"The Practical Use of Latensification" was the title of an article in *American Cinematographer* (32:54, February, 1951) by A. S. C. photographer P. Tannura. Therein he described the manner in which he used Columbia Pictures "fifty-foot-candle" system of low-level lighting to make that studio's picture "Harlem Globetrotters".

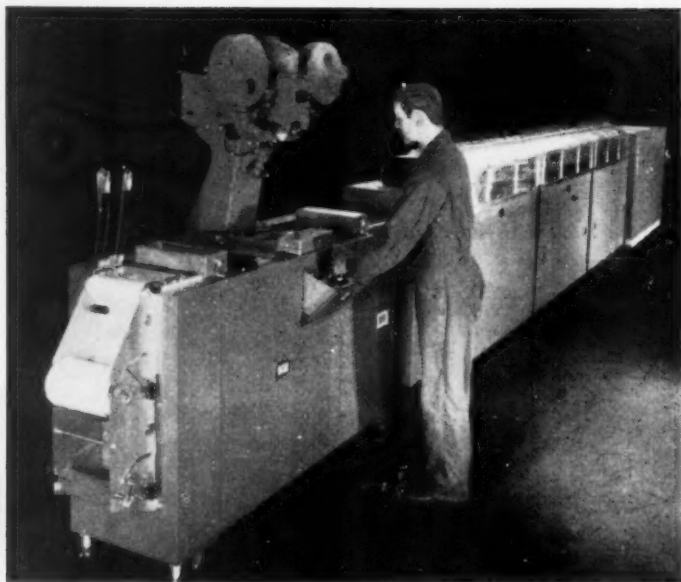
The processing of motion-picture positive film by high temperature developers and fixers, and subsequent drying of the film by turbulent air were discussed in two papers. R. Hodgson and J. Hammer of Paramount Pictures Corporation stated in the first paper (*J. Soc. Mot. Pict. Tel. Eng.*, 56:261, March, 1951) that film so processed is superior in some respects to film processed by conventional laboratory methods. L. Katz in the second paper discussed the theoretical and practical aspects of ultra-rapid drying of motion-picture film by means of turbulent air. (*Ibid*, 56:264, March, 1951).

The adoption of safety base film throughout the motion-picture industry has required the abandonment of the standard Bell and Howell perforation of colour release prints. Looking towards the adoption of a single standard perforation of negative and positive films, W. F. Kelly and W. V. Wolfe described tests by the Motion Picture Research Council covering registration problems as well as accelerated and normal release tests on Dubray-Howell perforated black-and-white prints (*J. Soc. Mot. Pict. Tel. Eng.*, 56:30, January, 1951). W. G. Hill also discussed the problem of standardization in this field (*Ibid*, 57:108, August, 1951).

The part that motion pictures have played in the work of the United States Department of State in the global war of ideas was described by T. Canning (*Mot. Pict. Herald*, 184:23, August 25, 1951). The magnitude of the operation was indicated by the 1950 expenditure of more than 11 million dollars.

Television

The rapid growth of television in the United States made it one of the nation's biggest industries, and in it photography



AIR PORTABLE PRINTER AND PROCESSING MACHINE

Uses 35mm., 70mm. and 9½-inch wide film. Capacity about 14,000, 9 x 18 inch prints per eight-hour day. Machine is divided into several sections for convenient transportation.

Credit: U.S. Air Force.

continued to play an ever-increasing role. At least 30 per cent of all TV programmes were on film and some estimates went as high as 50 per cent. In 1951 the industry was expected to use 300 to 350 million feet of film, most of which was black-and-white 16mm. motion-picture film. Some producers however, were already shooting films in colour.

Television stations continued to be interested in older films. A Los Angeles (California) station, KTTV, for example, bought 175 movies, mostly westerns, in one group, all of which had been made before 1947.

J. Fairbanks described a new development in filming TV shows that is economical of both time and effort. In the Multicam Process three or more cameras are used simultaneously to record a scene from three or more angles from long, medium, and close-up positions. It permits a picture to be photographed in continuous action. (*Internat. Phot.*, 23:6, February, 1951).

Much new equipment was introduced. Besides new cameras and lenses, two new projectors were notable. The Eastman 16mm. Television Projector, Model 250, was one, and a continuous projector for film was the other. The latter, developed by the Bell Laboratories, was described in a paper by A. C. Jensen, R. E. Graham, and C. F.

Mattke at the October, 1951 convention of the Society of Motion Picture and Television Engineers in Hollywood, California.

Stereoscopic Photography

Most new developments in this field concerned motion pictures; however, at least four new still cameras were introduced.

One high point of the year in stereoscopic motion pictures was a demonstration of Cinerama, a new variation of three-dimensional movies, invented by F. Waller of Huntington, New York. Three projectors, each filling one third of a huge curved screen (about three times as wide and twice as high as a conventional movie screen), showed a scene which had been photographed at different angles with a three-lensed camera. The screen was too large for the eye to see clearly all at once, and the images caught by the corner of the eye plus the curve of the screen produced a three-dimensional effect. (*Time*, 58:94, July 2, 1951).

Colour Photography

Another amateur colour negative film from which colour prints can be made, was made available in 120 and 620 roll film sizes. (*Home Movies*, 18:287, August, 1951). Kodachrome Professional Sheet Film, on the other

hand, was discontinued by the Eastman Kodak Company to make possible a more intense effort towards manufacturing and improving the customer-processed Kodak Ektachrome Sheet Film. A list was published of 60 commercial laboratories in the United States that were equipped to process Ektachrome Film.

As an aid to colour photo-finishers processing Kodak Ektachrome Film, the manufacturers provided control strips by means of which the processor could check the condition of his solutions and the consistency of his results. From the moment the strips are exposed until they reach the finisher, the strips are kept frozen.

In Hollywood no fewer than six colour processes were available or were about to be made available in a field that not long ago was dominated by Technicolor. These included Tri-Art Color, Cinecolor, Supercinecolor, Trucolor, Ansco Color and Technicolor. Twentieth Century Fox's lenticulated colour process was said to be still in the development stage. A new company Lenticolor, Ltd, was formed to control the patent Keller-Dorian and Kislyn in the field of film. Licenses were granted to the Eastman Kodak Company and were offered to others.

As the film user rather than the film manufacturer has become directly concerned with processing and printing colour films, interest in the sensitometry of colour materials and processes has grown throughout the motion-picture industry. F. C. Williams discussed the problems of colour sensitometry and indicated that the sensitometric apparatus and techniques now available are adequate for important applications in the manufacture and use of colour materials. (*J. Soc. Mot. Pict. Tel. Eng.*, 56:1, January, 1951).

Technicolor announced a change in colour balance of its three-strip system from that of sunlight to a colour temperature of about 3350 K. This change followed the earlier announcement of a speed increase in the Technicolor system by a ratio of 450 foot-candles to 300 foot-candles on a sunlight basis. By going to 3350 K, a further speed increase to 150 foot candles was obtained. The emulsion characteristics of the film, the

optical system of Technicolor cameras, and the film processing procedure were all revised. (*J. Soc. Mot. Pict. Tel. Eng.*, 56:569, May, 1951).

In the foreign field of colour motion pictures, G. Monteleoni described the use of a new colour film in Italian motion-picture releases. A new British direct negative colour process was described by W. Frerk. (*Functional Phot.*, 2:13, March, 1951). The method of direct three-colour development will be used for a motion-picture film to be called Alfacolor and for roll film, sheet film, and paper, all to be called Alfachrome.

Among the year's most unusual photographs should be noted the colour picture in *Life Magazine*, Volume 31, for July 16th, 1951 of an atom bomb being exploded earlier in the year in Nevada; a six page, folded, panoramic spread of a full solar cycle taken at one hour intervals north of the Arctic Circle; and a night colour flashbulb photograph of Levittown, Long Island, New York, said to be the largest such photograph ever made.

About 32 different huge Coloramas, or colour transparencies, each 18- by 60-feet in size, were displayed in the New York Grand Central Station between May 15, 1950, when the first one was shown, and the end of 1951. Similar smaller exhibits were shown in four other cities, Buffalo, Detroit, Cleveland, and Cincinnati.

Military and Aerial Photography

The Korean fighting and the national defence programme stimulated many new developments in military and aerial photography. J. Burke and G. Schmesinger outlined the characteristics of a German three metre focal length camera and described the design, alignment and testing of a folded three metre focal length camera made by the U.S. Army Signal Corps. (*Phot. Eng.*, 2:1, No. 1, 1951).

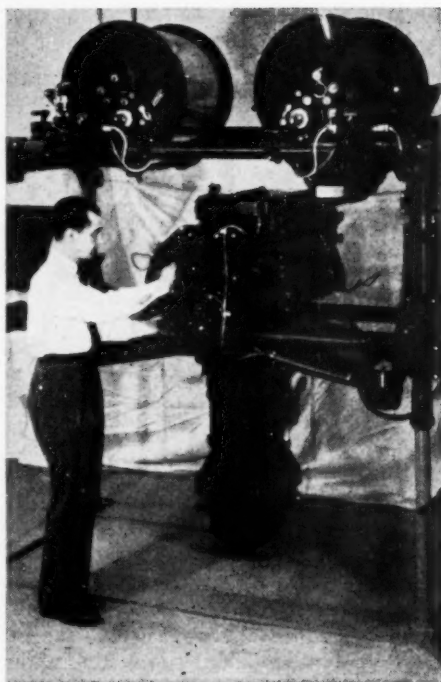
The basic necessity for making photographic enlargements at sea led to the development of an electronic flash enlarger by the Aeronautical Photographic Experimental Laboratory, Naval Air Material Centre. The equipment incorporated a gaseous discharge lamp for its light source, adapters for roll film and sheet film to accommodate sizes from 24 x 36mm. to 7" x 7",

a photocell-controlled lens aperture, and an automatic roll paper easel. The U.S. Signal Corps Engineering Laboratories developed a camera named "Two Minute Minnie" which uses the electrostatic, electrophotographic process called Xerography.

By the use of a standard X-ray machine and Polaroid Film similar to that used in the Polaroid-Land Camera, it was possible to make radiographs in forward battle areas to determine the extent of injuries without evacuating soldiers to hospitals equipped with darkrooms and conventional processing equipment. (*Wall Street Journal*, March 4, 1951). A new combination aerial combat-reconnaissance camera was announced by Bell and Howell. Designated Type A-6 by the Air Force, it is a lightweight portable 35mm. motion-picture camera of extreme versatility. (*Amer. Cinematographer*, 32:280, July, 1951).

Two spectacular colour photographs of bomb damage at Wonsan, Korea, (*Life Magazine*, 31.6, 17, July 9, 1951), illustrated a limited description of the S-11 electronic aerial strip camera. Component parts include a scanner for determining ground speed, a synchronizer which transforms information from the scanner into altitude, air speed, slit width and exposure information, and a servo power unit that modifies these data for focal length and depression angle of the camera. The camera itself, receiving all this information, drives the film at the correct speed across the slit. This S-11 strip camera was used along with a K-22 (24-inch focal length) aerial camera to determine the heights of the sea-walls at the two invasion beaches at Inchon, Korea, prior to the invasions. Discrepancies between the pre-invasion (aerial) measurements and the post-invasion (ground) measurements averaged only about six inches. (*Photogram. Eng.*, 17.78, March, 1951). Vital battle time was saved by radioing back aerial photographs, made by the Land process, of enemy territory to show battle positions and strength. The method is much the same as that by which news photographs are now transmitted within this country.

Among the new developments in Naval photography reported by Captain J. H. McElroy were the XCA-11, a continuous-strip camera; the SCA-12, a single frame, image-motion compensation camera; the processing and printing equipment for the 70mm. film used in the XCA-11 and XCA-12



PERKIN-ELMER TRANSVERSE PANORAMIC CAMERA

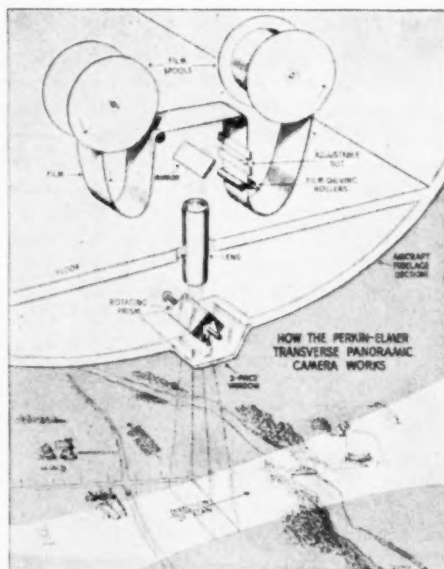


Diagram shows prism which rotates across direction of flight while a picture 18 inches by 10 feet is exposed in the camera. Film reels hold 5,000 feet of film 18 inches wide.

Credit: U.S. Air Force.

cameras; a deep-sea, underwater camera Type XCPX; the Mark 4 Submarine Periscope Camera; an electronic flash enlarger and the CA-8 Cartographic Camera. (*PSA Journal (Phot. Sci. and Tech.)*, 17B:6, February, 1951). (Illustration p. 98.)

At the Naval Ordnance Test Station, Inyokern, China Lake, California, a new continuous processing machine for film 70mm. to 12 inches wide was developed, utilizing the principles of motion-picture film processing. H. Hewston and C. Elmer described the details of design and operation of the machine. (*J. Soc. Mot. Pict. Tel. Eng.*, 56:613, June, 1951).

A huge aerial reconnaissance camera was shown in March, 1951 by the Perkin-Elmer Corporation. The modified strip camera was eight feet high, weighed about 1,500 pounds, and had a focal length of 48 inches. The field of the camera covered a continuous strip of territory 100 miles wide from an altitude of 40,000 feet. The spool, loaded by Eastman Kodak Company, held 5,000 feet of film, enough to photograph the entire state of Pennsylvania from 40,000 feet in less than one day. (*Time*, 57:54, March 12, 1951.)

P. Carman and R. Carruthers discussed methods of minimizing the effect of aircraft vibration on the quality of air photographs and described an improved method of testing aerial camera mounts as well as an experimental mount having unusually good vibration elimination characteristics. (*J. Opt. Soc. Amer.*, 41: 311, May, 1951).

An experimental study of the photography from the ground of objects in the upper atmosphere showed that the results were improved by the use of long focal-length lenses, high contrast film, and colour filters chosen with regard to the relative spectral qualities of the object and the sky background. In the report of this investigation, C. Nelson and D. Hamsher described a high contrast, high speed panchromatic film especially designed for the work and gave exposure and processing data for it. (*J. Opt. Soc. Amer.*, 40:863, December, 1950).

Underwater Photography

A. Schoeni described the history of the U.S. Navy's interest in underwater photography and reviewed the equipment, up to

and including the currently used French-made Aquaflex Camera. (*Camera Mag.*, 74:90, June, 1951). J. Hahn reported on some of the problems encountered in deep-sea underwater photography, and biologist J. F. Storr wrote a detailed account of his personal experiences and the equipment he developed for photographing marine life in the Bahama Islands. (*Intern. Photographer*, 23:10, July, 1951).

The U.S. Naval Ordnance Laboratory and the Woods Hole (Mass.) Oceanographic Institution jointly performed an elaborate experiment to observe the expansion and contraction of explosion bubbles taken at depths as great as two miles. Three cameras were used: a 35mm. Fastex, Eastman High Speed, and a modified Bowen rotating mirror-frame camera. The latter camera, used for making studies at the greatest depths, made a series of one hundred pictures at the rate of from 20,000 to 30,000 frames per second. (*Amer. Cinematographer*, 32:48, February, 1951).

High-Speed Photography

H. Edgerton and W. Wyckoff described the Rapatron high-speed still-exposure camera. The shutter is of the magneto-optic "light valve" type operating by the rotating of the plane of polarization of light traversing glass in a magnetic field. It has at least a 30-degree viewing angle, and takes pictures of 2 to 20 micro seconds with a high degree of resolution. (*J. Soc. Mot. Pict. Tel. Eng.*, 56:398, April, 1951).

The hypersonic research facilities* at the

*See also *A.P.-R.*, Vol. 56, p. 98.

Ames Aeronautical Laboratory, Moffet Field, California, include a 10- by 14-inch supersonic wind tunnel and a supersonic free flight wind tunnel. V. Stevens of the National Advisory Committee for Aeronautics described these tunnels and their associated equipment and outlined the techniques by which measurements are made at speeds of Mach numbers of 3.5 to about 8. (*J. Appl. Physics*, 21:1150, November, 1950.) Faro, Small and Hill of John Hopkins University described tests designed to produce supersonic streams at ten and sixteen times the speed of sound. (*J. Appl. Physics*, 22:220, February, 1951).

Photogrammetry

The major part played by photogrammetry in highway location surveys was described by J. S. Beazley (*Photogrammetric Eng.*, 17:571, September, 1951). At the seventeenth annual meeting of the American Society of Photogrammetry, held in Washington, D.C., January 10-12, 1951, there was held a panel discussion on cameras, lenses and calibration, moderated by L. E. Howlett. Differences of opinion existed, of course, but progress towards standardization was very evident. (*Photogram. Eng.*, 17:391, June, 1951).

In the field of new equipment, R. Prickett and M. Morris described the orthogonal photographic scanning camera, known as the Orthocamera, originally invented by H. L. Cooke. By completely eliminating perspective the Orthocamera takes pictures or orthographs that combine the geometrical characteristics of the best mechanical drawing and the familiar, easily interpreted, pictorial effects of ordinary photographs. (*Ibid*, 16:823, December, 1950).

An electrically-tripped 35mm. camera for airborne mapping and charting applications was developed by Cook Research Laboratories. Capable of taking pictures at the rate of four frames per second, the camera had an electronic flash illuminating system with a discharge duration of about ten microseconds. A switch located on the camera shutter triggered the flash at the instant of maximum shutter opening. (*Mach. Design*, 23:136, February, 1951).

The Fairchild Precision Camera Calibrator, announced in September, 1950, is a modification of the very exacting Precision Camera Calibrator designed at the National Bureau of Standards. The device provides means of testing the resolution of lenses up to 12 inches in focal length and having entrance pupils equal to or less than 1.45 minutes in diameter. The solutions to problems arising from the inclusion of resolution test conditions in equipment, designed initially for distortion testing was described by Mrs. C. Norton. (*Photogram. Eng.*, 16:688, December, 1950).

A photographic printing and processing machine, developed for mass production of reconnaissance photography but suitable for printing photographic material used as a basis for charts and maps was described by

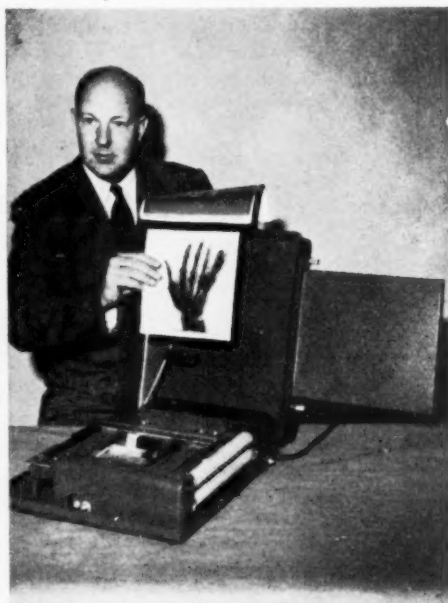
G. T. McNeil. (*Photogram. Eng.* 17:484, June, 1951).

The Photographic Process

A new method of photographic processing that eliminates the necessity for washing films and prints was developed by the U.S. Army Signal Corps. Known as stabilization processing, the new method permits processing times ten times faster for film and twice as fast for prints. Briefly, the process consists of development in a special amidol developer, rinse in stop bath, followed by treatment in a stabilizer solution.

An extensive research investigation on coupler compounds used in emulsion and developers for colour materials was reported in a comprehensive paper entitled "The Chemical Constitution, Electro-chemical Photographic and Allergenic Properties of p-Amino-N-Dialkylanilines" by R. L. Bent and twelve other scientists. (*J. Amer. Chem. Soc.*, 73:3100, 1951).

The action of developers as tanning agents was described by R. B. Pontius (*PSA Journal (Phot. Sci. and Tech.)* 17B:76, September, 1951).



RADIOGRAPH EXPOSED AND PROCESSED IN 60 SECONDS WITHOUT USING A DARKROOM

Obtained with a Polaroid-Land attachment (shown) and a special Polaroid film used on standard X-ray machine. Process may revolutionise battlefield diagnosis and treatment of wounds. Credit: Polaroid Corporation.

R. W. Henn discussed the qualitative determination of metallic (cationic) and anionic constituents of photographic scums and sludges. (*Ibid.*, 17B:60, April, 1951). The activity of sodium sulphite in fixing baths was the subject of a paper by E. Gruenthal. (*Ibid.*, 17B:90, September, 1951).

R. W. Henn and J. I. Crabtree described the action and optimum operating condition for an acetic acid stop bath and made specific recommendations for replenishing Kodak Stop Bath SB-5a, a photo-finishing formula. (*PSA Journal (Phot. Sci. and Tech.)*, 17B:13, February, 1951).

For the photo-finisher, F. J. Cowan and R. L. Huber wrote a review of practical methods of film processing control. (*Photo Developments*, 26-30, February, 1951). The Eastman Kodak Company introduced a new stop bath and a new fixing bath, known respectively as Kodak Stop-O-Mat and Kodak Fix-O-Mat, for use on its Continuous Paper Processors.

A symposium on photo-processing consisting of 14 papers on various subjects was held at Asbury Park, New Jersey, under the joint sponsorship of the Signal Corps Engineering Laboratories and the Society of Photographic Engineers (*Phot. Engineering*, 2:87-209, 1951).

In a paper entitled "Formation of the Latent Image by X-Rays" (*PSA Journal (Phot. Sci. and Tech.)*, 17B:19, February, 1951), E. T. Larson reviewed the similarity between the effects of X-rays and visible radiation on silver halide emulsions and noted that the addition of small amounts of gold compounds may increase the X-ray sensitivity of an emulsion by as many as ten times.

The problem of water supply in darkrooms was discussed by H. F. Walton (*Amer. Phot.*, 45:341, June, 1951), who described the use of an ion exchange process for water softening and by D. Hanney and D. M. Waldron who described temperature control equipment. (*Phot. J.*, 91B:88, July-August, 1951).

F. H. Perrin and J. H. Altman described the revolving-power camera in the Kodak Research Laboratories. (*J. Opt. Soc. Amer.*, 41:265, April, 1951). L. A. Jones and G. C. Higgins in Parts V, VI, and VII of their series of papers on photographic granularity and graininess (*Part V: J. Opt. Soc. Amer.*, 41:41, January, 1951; *Part VI: Ibid.*, 41:64,

February, 1951; *Part VII: Ibid.*, 41:192, March 1951), described the operation and performance of a variable-magnification instrument for measuring graininess and a microphotometer for the measurement of granularity.

A method of determining the contrast of a photographic paper was proposed by G. Ehrenfried. (*PSA Journal (Phot. Sci. and Tech.)*, 17B:83, September, 1951). L. E. Varden (*J. Soc. Mot. Pict. Tel. Eng.*, 56:197, February, 1951), described a semi-automatic colour analyzer for determining rapidly the extent of unbalance of a processed colour negative or colour positive monopak film.

Documentary and Industrial Photography

Microfilm is an important means of spreading information; so important, for example, that the United Nations Educational, Scientific and Cultural Organization conducted a world-wide survey of the uses, practices and equipment in various countries of the world.

Microfilm continued to be one of the best means of preserving vital documents against the ravages of fire, flood, and war. The Ford Motor Company, for example, during the last two years microfilmed more than 1,250,000 of its vital designs and engineering drawings and planned to process at least three million more. The New York City Public Library embarked on a project of microfilming eight million cards of its public catalogue over a period of ten months, following which 4½ million cards of the official catalogue will be processed.

A selector used by the Library of the United States Department of Agriculture could scan about 70,000 index entries per minute. Using coded indexes for each abstract, the selector picks out items of information pertaining to a single index entry and makes photographic copies on an auxiliary reel of film which is then processed in the normal manner. (*Ind. Eng. Chem.*, 42:1460, August, 1950).

A new Swedish copying camera using perforated 35mm. film was also introduced. With the aid of a variable masking device, single lines or illustrations can be copied. (*Tidskr. for Dokumentation*, 6:3, No. 1, 1950).

A new method of making microfilm copies of radiographs using a negative-positive duplicating technique and a machine designed



DEEP SEA CAMERA

FOR STUDY OF UNDERWATER EXPLOSIONS

Explosive charge is located within frame being lowered overboard. Steel sphere at end of frame contains high-speed camera.

specifically for the purpose were announced by the Eastman Kodak Company.

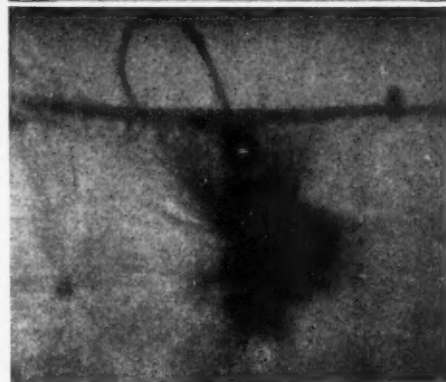
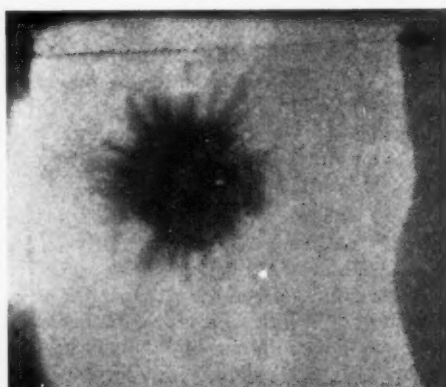
Three other copying methods were of interest. The Haloid Xerox Copier, Model A, was used with the Xerox Model XEA-1 (projection) Printer (equipped with a Wollensak wide-angle lens) at Wright-Patterson Air Force Base to make large projection prints from microfilm negatives. (*Pop. Phot.*, 28:120, June, 1951). Xerography was also used to produce in less than one minute a paper master plate of any office form, letter, or drawing which can then be duplicated by a Multilith process duplicator. The third new process, the Agfa Copyrapid process, was an application of the diffusion-transfer system used in the Gevaert Diaversal, Polaroid-Land, and similar systems. (*Camera (Luzern)*, 29:376, December, 1950).

The Paragon-Revolute M4 Blueprint Machine was described, as used by General Motors Corporation, Ford Motor Company, and the U.S. Army Engineering Corps, for processing Kodak Autopositive and other papers. Kodak Repro-Negative Paper, similar to Autopositive Paper, was introduced along with Autopositive Translucent Paper, which was said to have the advantage of faster print-back speed.

Some interesting applications of photography were made known during the year. The Automotive Liability Reduction Association introduced a new service for use by truck fleet owners. It included a kit with camera, flash attachments, and record forms. Film development and negative filing is provided by the Association. (*Amer. Phot.* 45:239, April, 1951.)

The Cuban legislature passed a law requiring photographic identification of all qualified voters. M. R. Kondolf of Webster, New York, invented a camera for police use that photographs moving automobiles, and records the speed at which they were travelling. The production of industrial identification photographs was speeded up by the introduction of the Fairchild-Polaroid Identification Camera.

An entire new wing of Eastman House in Rochester, New York, was opened in May. Known as the Brackett Clark Hall, it is



Photographs of underwater explosions made with camera.

Credit: U.S. Navy Ordnance Laboratory and Woods-Hole Oceanographic Institution.

devoted to the subject of photographic manufacture.

Scientific Photography

A massive telescopic camera especially designed for photographing meteors was installed in Harvard University's meteor station in New Mexico. The optical system covered a 52 degree field, or one-tenth the area of the visible sky. (*Time*, 57:82, June 4, 1951).

"The Geomorphology and Photo-Geological Study of the Flat Lands" by F. Melton and "Photo-Interpretation of Coral Reefs" by C. Teichert and R. Fairbridge, were two of the papers included in a "Symposium on Information Relative to Uses of Aerial Photographs by Geologists." (*Photogram. Eng.*, 16:721, December, 1950). Because there are only thirty basic land patterns in the world, any area which can be photographed from the air can be interpreted by geologists. These interpretations can have extremely practical implications; for example, by means of aerial photographs, uranium, diamond and gold deposits have been detected, water reserves can be located, and the progress of erosion can be predicted. (*Life Magazine*, 30:105, June 25, 1951).

Macromolecules, thought to be the largest of all molecules, were photographed with the aid of "metal shadowing" and the electron microscope. The technique, developed by R. W. G. Wycoff of the National Institute of Health and C. E. Hall and J. Gross of Massachusetts Institute of Technology, showed in three dimensional form the shapes and surface contours of such substances as the tobacco mosaic virus, plant necrosis virus, influenza virus, hemp globulin and frog muscle. (*Life*, 30:72, April 23, 1951).

J. A. Chambers described a temporal sequence camera, the function of which is to provide a continuous, non-intermittent record of phenomena or of objects in sustained, accelerated or decelerated motion, including a simultaneous, accurate, and continuous recording of the time factors involved. (*Phot. Eng.*, 2:53, No. 2, 1951).

In a course of study for selected workers, given at the Institute of Nuclear Studies at Oak Ridge, Tennessee, in July, 1951, much attention was given to stripping film techniques for autoradiography. One technique in particular, developed at Kodak Limited,

in England, has been used successfully by S. R. Pelc in the study of chromosomes. The method is said to give resolutions of the order of one micron, and is described in an article by R. H. Herz of Kodak Limited. (*Nucleonics*, 9:24, September, 1951).

A report describing several methods of photographic determination of the presence of uranium-bearing minerals in rocks and ores was written by L. R. Stieff and T. W. Stern of the U.S. Geological Survey for the Atomic Energy Commission. (*J. Franklin Inst.*, 251:567, May, 1951). H. Yagoda of the U.S. Public Health Service described special nuclear emulsions which he used to identify and estimate micro quantities of heavy metals that decay by alpha particle emission. (*Chem. Eng. News*, 29:1005, March 12, 1951).

A new British electron-sensitive emulsion, G5, especially valuable for cosmic ray work, was made available in thicknesses up to 600 microns. A. D. Dainton, A. R. Gattiker, and O. W. Lock determined that a p-diaminophenol developer gives satisfactory results for such thick photographic emulsions and described suitable processing conditions for them. (*Phil. Mag.*, 42:396, April, 1951).

A semi-automatic device for analyzing events in nuclear emulsions was developed by M. Blau, R. Rudin and S. Lindenbaur. (*Rev. Sci. Instr.*, 21:978, December, 1950). Another was described by A. V. Masket and L. B. Williams. (*Ibid.*, 22:113, February, 1951).

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The first issue of the official publication of the Photographers Association of America, *The National Photographer*, appeared in June, 1950. The first issue of a German publication, *Photo-Technik und-Wirtschaft*, appeared in November, 1950. This magazine had been published since July, 1947, under the name, *Foto-Kino-Technik*. The technical publication, *Kino-Technik*, resumed publication after a lapse of several years as a result of the war. The publisher is Radio-Foto-Kinotechnik SMBH Berlin-Borsigwalde.

A list of new books included:

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- Berg, W. F., *Exposure (The Fundamentals of Camera Technique)*, Focal Press, London.
- Bond, F., *Making Better Color Slides*, Parts I and II, Camera Craft Publishing Co., San Francisco.
- Chamberlain, K., *An Introduction to the Science of Photography*, Macmillan Co., New York.
- Clerc, L. P., *Properties of Photographic Materials*, translated from French by C. J. Duncan, Fountain Press, London.
- Greenleaf, A. R., *Photographic Optics*, Macmillan Co., New York.
- Kingslake, R., *Lenses in Photography*, Garden City Books, New York.
- Nibbelink, D. D., *The Complete Book of Lighting for Color and Black-and-White Photography*, Midland Publishing Co., Forest Park, Ill.
- Spencer, D. A., editor-in-chief, *Progress in Photography 1940-1950*, Focal Press, London.
- Spottiswoode, R., *Film and Its Techniques*, University of California Press, Berkeley, California.
- Abridged Scientific Publications from the Kodak Research Laboratories*, Vol. XXXI, 1949, Eastman Kodak Co., Rochester, N.Y.
- Veroemlichungen der wissenschaftlichen Photo-Laboratorien der photographischen Abteilung Agfa* Vol. VII. 1945-1948, S. Hürzel, Leipzig.



After dinner we felt like a sleep—



*but were soon awakened by someone
approaching*



It looks like a stranger—

THE LAMB AND THE PUP . . .

if so, I'll protect you



It's all right—it's only the master!



Ha! Ha! Ha! Fancy not recognising him . . .



. . . E. G. CUBBINS

Ruined Cities of Ceylon

Recently it was my good fortune to be able to pay a short visit to Ceylon—this on an official assignment to an international conference. In the course of the arranged programme, a brief tour was made through the central portions of what is known as the 'dry zone' of the island. It was in this region that the ancient Singhalese kingdoms flourished, and the ruins of these cities and the accompanying extensive irrigation systems remain as interesting archaeological relics, many of which have been rediscovered only within the last few decades. Numerous land settlement schemes are now being developed in an effort to resettle this region which, following the destruction wrought by wars and counter-wars, and the depredation of malaria, lay blanketed by low jungle for many centuries. The party made an inspection of several of these new colonisation schemes while the opportunity was also provided to spend brief periods in several of the ruined cities.

Two cameras were hopefully carried on the tour, a 24 x 36mm. model for colour records and a twin-lens reflex for more serious work. Films used were Kodachrome and Super-XX, the latter being developed in D-25 on return to Australia. Literally hundreds of picture subjects were seen in the villages and countryside, but a strict official schedule and poor weather conditions limited the opportunities for pictorial work. However, the area can be recommended to those who may travel and photograph more leisurely.

The most ancient of the ruined cities is Anuradhapura, which spreads over an area of several square miles. Prominent features are the huge dome-shaped shrines, the dagabas, which are solid structures each built over some specially holy relic. The Ruaneliseya Dagaba was constructed over two thousand years ago and it was interesting to hear that this had recently been restored to something resembling its original condition. Returning late one afternoon to Anuradhapura, we passed close to this dagaba. The sun, which had been obscured by heavy rain clouds all day,

By C. S. CHRISTIAN



"... semi-circular paving stones, decorated with carvings of elephants, oxen, horses, lions and geese ..."

shone brilliantly for a few minutes, its low rays outlining the dome in a brilliant orange glow. The few moments of bright sunshine closely resembled the drawing of a curtain to reveal the monument in all its ancient glory and impressiveness. There was just sufficient time to make a few hurried exposures in black and white, and especially in colour, before the clouds again covered the sky.

Apart from the dagabas and temples, most of the structures in this ancient city are reduced to relics of basement structures, columns and wall fragments. Many of the ruins are decorated with beautifully carved stonework, such as the figure of Naga Raja, the Cobra King, or of animals; of the latter elephants are the most popular. 'Moonstones,' which are semi-circular paving stones, decorated with carvings of elephants, oxen, horses, lions and geese, are set at the foot of many of the entrances to the buildings. As these stones are horizontal and are ten feet or more across, they are extremely difficult to photograph without distortion, unless one goes prepared with a camera with a built-in stepladder. As a result, I had to content myself with a few close-up shots of mere portions of the great array of parading animals.

Although much of the dry zone of Ceylon has a rainfall of sixty inches or more per annum, the rain is restricted to a short period. Past civilizations in this region thus had to depend upon the storage of water and the development of numerous irrigation schemes to produce the essential grains. The country is relatively flat and water reservoirs or 'tanks' were formed by constructing low banks, or bunds, across the natural shallow drainage lines. Each of the largest of these artificial lakes covers an area of several thousand acres. Some are still in use and others are being re-established for modern irrigation purposes. These tanks, known locally as *uwas*, are essential features, and are associated with all the ruined cities.

(Concluded on page 111)



"... shows portion of a round shrine, the Vatadage."



"... closely resembled the drawing of a curtain to reveal the monument in all its ancient glory and impressiveness."

"... such as the figure of Naga Raja, the Cobra King ..."

"Each of the largest of these artificial lakes covers an area of several thousand acres."



Notes from the Magazines

MONSIEUR DAGUERRE

By Beaumont Newhall

The records of Cormeilles-en-Parisis, a town within sight of Paris, state that Louis Jacques Mande Daguerre was born there on the eighteenth of November, 1787. When he was five his father, a minor government official, moved to Orleans, and in that city Daguerre grew up. He was always drawing, and showed such skill that his father apprenticed him to an architect when he was thirteen. At sixteen he was restless for Paris; a place was found for him there with Degotti, a scene painter, famous for making sets for the Opera.

Soon the young artist left his master and struck out on his own. As the late George Potonniée tells us in his book, "Daguerre Peintre et Decorateur," more than one popular play became memorable for Daguerre's stage sets, and critics even suggested that the scene painter should take the bows before the actors and the author.

He met, while painting scenery, Charles Marie Bouton, assistant since 1800 of Pierre Prevost, who operated three of those circular skylighted buildings lined with immense murals of cities, battlefields and historic events which were known as "panoramas."

Daguerre and Bouton dreamed of something that would go beyond the stage and the panorama. "Means should be found," they wrote, "of imitating aspects of nature as presented to our sight, that is to say, with all the changes brought by time, wind, light, atmosphere." They formed a partnership. On July 11, 1822, an unornamented, barracks-like building, its roof a skylight, opened its doors to the Parisian public. On its gable the single word "DIORAMA" was spelled out in huge letters.

Like its neighbours, the new building was a theatre. Yet no actor was to tread its boards during the seventeen years of its life. For it was a theatre for scenery alone, painted in the most illusionistic way and presented with every artifice to fool the audience into believing that what they saw before their eyes was the size of life and just as real.

Within the Diorama were three separate stages radiating from a single, circular auditorium which, with its wall, boxes and proscenium, revolved at will, so that the spectators were brought to face each stage in turn.

At the grand opening, one of the stages showed "An Interior View of Trinity Chapel in Canterbury Cathedral," and the other, "A View of Sarnen Valley, Switzerland." We learn from a theatrical critic that, once within the dim auditorium, reached by climbing a winding staircase, "you will find that you are in a gallery over the entrance of an ancient cathedral. You are transported to Canterbury. At one moment the sky darkens, nave and vaults become gloomy, the golden light has left the pillars. Now the cloud which hid the sun has passed, sunbeams burst forth again amid the arches. But where do these exclamations of surprise come from? Look, the wall at the right is opening up! What bright sun! What rich country! Looking around, I can still see the nave of Canterbury. But it is slipping away—the wall is closing. Don't you see that you're turned around, without knowing it, and carried, with the chair you're sitting on, to a charming Swiss valley? Water falls from that hillock. Those clouds are turning dark and losing

their bright colour. It's raining down there behind the hill, the mountains are disappearing beneath mist. But the storm blows over, the sun comes back to illuminate the valley. Whoever has not seen such marvels doesn't know one of the greatest pleasures that can be experienced."

Daguerre and Bouton created these 'marvels' by painting two pictures on one semi-transparent canvas. By reflected light the front picture was visible; by transmitted light the rear picture was seen. Hence "diorama," from the Greek *dia* (through) and *hermos* (seen). Shutters and curtains controlled the skylights and windows of the new building so that one picture could be made to fade out while the other became visible. Between the paintings—which measured 72 x 46 feet—and the proscenium, large-scale foreground details were added. In front of Canterbury Cathedral masons' tools and roughed-out stone blocks lay about; two workmen were taking a nap, and a woman prayed by the tomb of Henry IV. In the Sarnen Valley tableau you looked past a gushing fountain to the distant landscape.

Ordinarily two shows were presented, each on separate stages. The third stage was reserved for the construction of the new attraction. The Sarnen Valley was replaced after seven months with "A View of the Harbour of Brest"; the animation consisted of the moving sea and the smoke of the city.

After the Revolution of 1830 which brought Louis Philippe to the French throne, Bouton, who had painted ten of the pictures, moved to London where he built a Diorama in Regent's Park. Daguerre, in Paris, now pushed illusionism even further by including real objects in his Diorama. For the "View of Mont Blanc" he imported from Switzerland a peasant cottage, barn, live goats and growing pines. "Papa," the Prince asked the King of France at a command performance, "is the goat real?" "I don't know, son, you'll have to ask Monsieur Daguerre," was the father's reply.

Some critics charged that Daguerre had gone too far. He replied, "My only aim was to effect illusion at its greatest height; I wanted to rob nature, and therefore I had to become a thief." To sight he added sound; while visitors who knew Switzerland were naming for their friends the snow-covered mountains just as if they were sitting in a Swiss cafe, from off stage came the sound of the Alpine horns and folk songs.

For his most famous tableau, Daguerre showed Parisians a Parisian subject, daring them to compare illusion with reality: "A Midnight Mass at the Church of Saint-Etienne-du-Mont, Paris."

"First it was day; the nave was filled with chairs. Little by little the light faded, candles were lighted. Worshippers came to stand before the chairs, not appearing all of a sudden, as if by a trick of scene painting, but quickly enough to astonish you and yet gradually enough not to astonish you too much. The Mass began . . . an organ resounded under the distant vaults. Day broke; the congregation went away, the candles were put out, the church and the chairs appeared as in the beginning. It was magic."

Daguerre used in this painting a new principle: "The decomposition of light." He illuminated certain areas of the canvas with coloured lights and painted details in the complementary colour. Parts painted

green, for example, would disappear when green light shone on them; red areas, on the other hand, would appear black. "The Midnight Mass" was on view for three years, until October 13, 1837. Daguerre painted only three more tableaux for the Diorama; these ran for months on end.

At one o'clock, on the afternoon of March 8, 1839, the Diorama burned to the ground. Ten of the famous paintings were totally destroyed. Daguerre never rebuilt the Diorama. He had turned his attention to a new invention, which the public already knew by his name as the "Daguerreotype."

Modern Photography, December, 1951.

HIPPOLYTE BAYARD

By "Fotos"

Almost all great discoveries have their mysterious corners, and photography still holds its surprises. Was it not invented by Daguerre, or Fox Talbot, or was it Niepce? We thought it had all been settled long ago, but a recent article in *Noir et Blanc* backed up by 'photogenic' pictures taken long before photography was 'officially' invented, throws our attention once more to the early days of the art.

The story begins some ten years before the usual accounts. We shall tell it briefly in our own words whilst keeping closely to the account of Guy Breton (*Noir et Blanc*, July 18, 1951).

Around the year 1830, a shy and poorly clad young man called on a Parisian optician and enquired the price of one of their 'cameras.' "I have succeeded," proffered the visitor, "in securing pictures on paper by means of a camera, but I have only a crude box and I need a prismatic model to continue my studies."

Thereupon the young man pulled out of his pocket an old folder and showed a view of Paris rooftops which was neither a drawing nor a painting. "And that's what I do it with," added the youth, showing the optician a flask containing a brown fluid.

The price of the Chevalier 'dark boxes' was too high, and the young man departed, expressing hopes of being able to afford one later, when he would return.

But the Chevalier Brothers were not to see him again, and later, when one of their customers, Nicéphore Niepce, informed them of his method for making pictures, they regretted having lost contact with the earlier visitor.

Who then was this mysterious young man who possessed a working process of photography before Daguerre and before Niepce? There is little doubt that his name was Hippolyte Bayard,* whose pictures of the "Roofs of Paris" were shown later, in 1839, in an exhibition of paintings. Born in 1801, at Breteuil-sur-Noye, Bayard was a civil servant (Finances) and it was from his office window that he secured his views. Fortunately, the Société Française de Photographie has preserved many of Bayard's negatives.

Although the process of Bayard was slow and applicable mainly to still subjects, it had—with the later Talbot process—the advantage that copies could be repeatedly made from the original negatives; a practical advantage over the Daguerreotype which was soon to create such a sensation.

Bayard's process, whether from the inventor's irresolution or other causes of which we know nothing, failed to gain the limelight and remained little more

than a scientific curiosity, and he had the chagrin of seeing Daguerre emerge triumphant as the officially recognised inventor of photography.

The British Journal of Photography, September 28, 1951.

*"The most luckless pioneer was Hippolyte Bayard, who exhibited thirty photographs in Paris on June 24, 1839. His method was original: silver chloride paper was held to the light until it had turned dark. It was then plunged into potassium iodide solution and exposed in the camera. The light now bleached the paper, in proportion to its strength, and he thus obtained direct negatives, each unique."

"But in the spectacular publication of the Daguerreotype, the work of Bayard was completely overlooked. He commented on his misfortune in a photograph dated 1840. He showed himself half naked, propped up against a wall as if dead. On the back of the print he wrote:

"The body you see is that of Monsieur Bayard . . . The Academy, the King, and all who have seen his pictures admired them, just as you do. Admiration brought him prestige, but not a sou. The Government, which gave M. Daguerre too much, said it could do nothing for M. Bayard at all, and the wretch drowned himself."

From "The History of Photography," by Beaumont Newhall.

Ruined Cities of Ceylon

Continued from page 108

Ruins rarely make good subjects for pictorial photography, but at Polonnaruwa they appeared to be better preserved than was the case in the other cities, and one felt that with good lighting conditions there would be many opportunities for picture making. My illustration shows portion of a round shrine, the Vatadage. This is one of a group of buildings in which rested the Sacred Tooth of Buddha before it was removed to Kandy. There, once each year, this tooth relic is still paraded through the town in a spectacular Buddhist pageant, the Perahera.

One of the most fascinating of the places visited was Sigiriya. Here, on the summit of an 'unscaleable' rock over four hundred feet high, the parricide King Kasyapa built an impregnable palace fortress in the fifth century A.D. A stone staircase winds half way to the top which is then reached by a zigzagging climb up the nearly vertical rock face. From the palace ruins at the summit is obtained a fine panorama of the surrounding country. At the foot of the mountain is the village of Sigiriya with its tank and irrigated paddy fields; in the distance are the mountains of the wet zone, and in between is the jungle, scarred here and there by patches of 'chena.' These are small scattered areas cleared for temporary cultivation, and discarded when weeds and depletion of soil fertility made further cultivation unprofitable. This system of 'shifting agriculture' remains a major problem in many tropical countries.

Wild elephants still roam the jungle in parts of the region. In fact, during the period of our visit, a well-known Ceylon photographer was killed by one of these animals only a few miles from Polonnaruwa. Tamed elephants may commonly be seen carrying heavy loads, but throughout the region the main draft animals are the ox and the buffalo. These slow, patient, tireless animals fit comfortably into a landscape which still reflects the scenes of centuries past.

Reflex Copying

By H. G. A.

No doubt every amateur photographer, for some reason or other, finds use for an easy photographic copying method. Well, here is a technique that does not require a camera, and can be very useful for some of the old copying jobs which the average enthusiast encounters. Such a problem may be the copying of a musical score or of ubiquitous knitting directions. Even if the usual copying apparatus is available, it often means quite a chore setting it up for only a few copies—hence the reason for this easy, quick process.

Reflex copying, or the Playertype Process as it is sometimes called, can make satisfactory copies of black-and-white originals. After the technique is mastered, even coloured originals can be duplicated in monotone. The obvious limitation of this process is that only "same-size" copies can be made.

Theory

A sheet of reflex paper or single-weight contrasty bromide is laid face down on the original, and kept closely in contact. Light is directed onto the back of the bromide paper. This light, which penetrates to the original, is more or less absorbed by the black areas and reflected by the white areas. The reflected light strikes the sensitive surface of the bromide paper and causes such areas to appear darker when the sheet is developed. Hence we have a negative copy of the original which can be used as a negative in making a contact positive print.

The one difficult step in this process is ascertaining the exposure that will yield a paper negative of the correct density. More of this step later, when the detailed procedure is outlined.

Materials

Kodak Reflex Copying papers are obtainable in 6½" x 8½" size and larger in ten-sheet packets, but in an emergency Grade 4 or 5 single-weight bromide paper can be used quite successfully for both the negative and positive copy. However, the reflex copy paper is thinner and can be folded for filing or mailing without cracking. Furthermore, the reflex copy paper is extremely safe to yellow light, and can be handled and processed in a shaded corner or a normally illuminated room. To obtain the maximum contrast, both the negative and positive should be developed in a concentrated developer—Kodak D-72 in the proportions of 1:1 with water yields good results. A refinement is to add a drop or two of ten per cent. solution of potassium bromide to each ounce of mixed developer.

Procedure

There are only two pieces of special apparatus required—a sheet of plate glass and a layer of felt or sponge rubber—both several inches larger than the original to be copied.

The original is laid face up on top of the felt which should be black to prevent any registering of the reverse of the original. The bromide paper is laid face down and is kept in close contact with the original by the plate glass on top of the 'sandwich.'

The exposure is made by an opal globe (about 75-watt) held above the 'sandwich.' To obtain even illumination, the lamp should be at least the length of the diagonal of the original above the plate glass cover.

By exposing through a yellow filter, definition and contrast are enhanced. A suitable yellow filter can be made by fixing six thicknesses of yellow cellophane to a cardboard frame. The exposure is adjusted until a suitable paper negative is obtained—one which, when dried and held up to a strong light, shows a dense background with lightly printed lines. With the best paper negatives the printing or design can be read clearly by normal viewing of the surface, but a slight veil of grey density is noted over the entire surface of the paper. This is the normal appearance.

Printing the positive copy offers no difficulties, although in some instances the negative alone may be filed and read through from the back when the information is required. For printing, the same apparatus can be used, with the two emulsion sides of the paper negative and bromide paper placed together as for ordinary contact printing.

To obtain greater contrast, the positive can be slightly over-exposed and then treated with Farmer's Reducer, to 'clean it up.' By using this reducer, satisfactory copies can be made of coarse screen reproductions of photographs.

Wet Negatives

As with other branches of photography, there are times when a print must be obtained quickly—even at the expense of first-class work. Fairly good prints may be obtained from wet paper negatives by adopting the following procedure:

1. Fix and wash the paper negative for fifteen minutes.
2. Remove excess water by blotting.
3. Lay on glass and blot again.
4. The bromide paper for the positive should be quickly placed in position and immediately pressed into contact by a slight pressure on the glass cover or felt pad.
Speed is necessary to prevent the bromide paper from curling when it comes in contact with the wet negative.
5. Expose and develop in the normal manner.
6. Complete the washing of the paper negative.

Prints made in this manner will not have the snap and contrast of those printed from dry negatives.

PHOTOGRAPHIC BIG BROTHER

... It's always been a problem how to work up camera club programmes that will hold the interest of the more advanced, and yet be understandable to the new members who are, more than likely, novices at photography. Some of the clubs have some good ideas along these lines. The Valisburg Camera Club of Newark, N.J., has what it calls a 'big brother' system. Each new member who needs some help in photography to get on to an equal footing with the older members, is assigned a big brother whose responsibility it is to help the newcomer whenever he needs it. All of us are willing to help, but the one who needs help is quite often too timid to ask for the assistance, or else he doesn't want to burden anyone with his beginner's problems. This assignment of a big brother does away with the hesitancy on the part of the new member, and puts a definite responsibility on the more advanced member to make a particular person under his wing for guidance. The novice benefits by his big brother's experience and, believe me, those big brothers get a kick out of knowing they're being of help to someone. . . .

The Camera Magazine, March, 1951.

Review of Contest Entries

NOTE: The attention of competitors is drawn to the necessity of always forwarding adequate return postage in respect of each group of entries.

NUMBER OF ENTRIES	101
(A/S 17, B/S 21, A/O 14, B/O 49)	
NUMBER OF COMPETITORS	43
NUMBER OF NEW COMPETITORS	4
NUMBER OF PRIZE AWARDS	22

K.L.A., Maroubra.—HC for an excellent 'candid' of a familiar Sydney personality. Chief weakness is the low camera angle and the inclusion of the patch of bright sky, the latter creating an area of strong contrast that tends to throw the whole picture out of balance. A better result would have been obtained by selecting a viewpoint out in the street (provided, of course, you kept a wary eye on the traffic!).

J.F.A., Cremorne.—In all a pleasant offering expressed in superior technique. "Sunshine and Fog" (HC) is perhaps the best of the Observatory Hill series, "Foggy Morning" being somewhat weak as regards the foreground and "Dawn Desertion" as regards the middle distance. "Winter's Avenue" is recorded with attractive tonal range. Interest tends to run out to the right, and a slight trim from this side might improve things.

F.E.B., Sydney.—Congratulations on the two listings which were mainly gained by above-the-average treatment of subject matter, though it must be admitted that both prints are somewhat on the hard side. "Bush Road" needs considerably more middle tone, especially down the right-hand side and foot. In "Reflections" the instant of exposure should have been delayed a few seconds until the rowing boat had come closer to reach the intersection of thirds.

E.C.B., Haberfield.—"Bush Flowers" exhibits nice print quality, but pictorially rather general—would be worth trying as a basis for hand-colouring. "Blowing Up" is an interesting dramatic treatment, but appeal appears to be almost evenly divided between the silhouette and the cloud formation; either the one or the other should dominate.

T.F.B., Randwick.—"Sunset on the Reef" is the better of your two, thanks to the delightful inclusion of the flying birds. The introduction of the wreck is, of course, out of key with the romantic nature of the balance; it would be difficult to eliminate entirely, but it could be substantially reduced in tone and about half the sky eliminated at the same time. "Washing Shells" is, we feel, neither one thing nor the other. As it is, the figures are too big to represent a mere accent in a marine study and too indefinite to represent a *genre* picture. In our opinion, careful consideration should be given to the matter of unity before making any exposure.

J.B., Waverley.—Prize award for "S-p-e-c-i-a-l" mainly on technical grounds; as a print somewhat on the heavy side and, of course, we would like to see the effect of a slightly twisted trim so that the boat will be aiming directly at the corner of the print.

H.P.C., Goulburn.—Frog close-up is quaint; weaknesses are over-strong lighting and the patterned nature of the vase. There is also the matter of depth of focus—it is always better to work at a slightly greater distance with a view to gaining all-over sharpness.

F.T.C., Naremburn.—"His Castle" had the greater possibilities, but we would have preferred to see the centre of the interest nearer to the intersection of thirds, that is, with a little less foreground and a little more at the top. "Quiet Down Here" had possibilities, perhaps with a slight change of viewpoint and less diffusion; the reason for the latter seems hard to explain.

E.G.C., Oaklands.—Congratulations on "The Marshes" which is better than "Puff Ball," which is rather formal. Both the other entries appealed, "Acacia" winning by a short head on the grounds of novelty and strong decorative treatment. The child portrait is pleasantly unposed, but a subject often seen in our contest prints. For your album trim in closer with a view to concentrating right on the actual head only.

A.F.D., Bendigo.—Congratulations on the three mentions. "Midday Sun" we consider to have substantial possibilities subject to a richer print and drastic trimming. Perhaps you could let us have a somewhat darker print for our files. "Old Faithful" is certainly an excellent technical result from one-half of a 24 x 36mm. frame; as a subject the animal is too much 'nose-on.' "Distant Homestead" had possibilities, preferably under more stark lighting conditions. "Cotton Wool" (fluffy cumulus cloud) was hardly worth the exposure; to have any appeal, surely a cloud formation should have a definite formation.

F.L.E., Narramine.—Both prints show attractive quality, "The Old Shed" being perhaps the better, though there is a tendency for the interest to be directed towards the edges of the print; the area might be worth studying under varying lighting conditions. "Three Huts" is ingenious, but in view of that motive trims from either side and top might be considered with a view to concentrating interest.

G.E., Papatoetoe.—Despite its 'studio' presentation, we just could not resist "Enraptured" with its delightful handling and supreme technique.

A.E.E., Kingaroy.—"Pals" is a quaint picture and an excellent result with your Brownie Reflex.

M.F., Taylor's Arm.—Welcome to the contest and congratulations on gaining a First Prize award at initial appearance. The arrangement is good but the technical treatment is somewhat on the contrasty side. The subject is one that might well be studied under various conditions of light and at different seasons of the year. The close-up is hardly so successful, the textures of rusty iron and weathered wood being so very similar; apart from that, there should be in evidence a stronger degree of composition. For your album take a trim of about 1" from the left and 1½" from the top with a view to eliminating duplicated material in those areas.

H.K.H., Chatswood.—Congratulations on the two listings—your work is nicely presented with attractive technique. We realise that it is difficult to strike anything of a new note in regard to that ever-present subject, the Australian landscape, but with your technical qualifications we would like to see you attempting something less conventional in this field. Of the two the prizewinner is the better owing to the decorative nature of the trees; the other is rather weaker on the compositional side, and some accent or centre of interest seems to be desirable. We are looking forward to your progress.

A.J.H., Goulburn.—Congratulations on amusing study of the puppy executed with first-class technique. For your album tone down the somewhat eye-catching hedge pattern in the background.

R.A.I., Regents Park.—Dray subject is the better of your two, but the HC listing was made mainly on the grounds of technique—as subjects, parked drays are not very strong in general appeal. Actually "Entrance Gates" possessed the greater possibilities, but as presented there seems to be a quarrel of interest between the iron gate and the 'zoo.' As the chief appeal appears to be the ironwork of the gates, an occasion should be selected when the gates are closed or better still, one closed and one half-closed. Perhaps a friendly word with the caretaker might do the trick.

A.M.J., Moonah.—Of your four "Stable Wall" is the best, but to our way of thinking the more pictorial print-area is the shadowed section to the left rather than the braced-up portion now occupying the major portion of the print—suggest you try this again; meanwhile for your album take substantial trims from foot and right. Lighting conditions were hardly suitable for "The Threshold"; it is seldom that a successful result can be gained of a subject in the shade looking out on bright sunshine. The symbolic subject is nicely recorded (apart from some diffusion down the right-hand side) but closer trimming is recommended with a view to concentrating interest. We would suggest a couple of inches from the right and 1" from the foot and left. "Shaded Path" is one of the very difficult ones owing to the extreme brightness range involved; apart from that, the introduction of some figure interest is desirable by way of providing an accent.

R.M.K., Punchbowl.—Congratulations on "The Diagonals" which has the distinct merit of making a new use of old material. The inclusion of so much sky and the spotty nature of the caps on the pillars appear to us as weaknesses; a trim from the top might be considered.

L.B.K., Albury.—All prints show very fair print quality. The best is perhaps the cat study, the animal having been gracefully posed. Next would come "Fishing Boats"; as the right-hand portion is the most appealing, interest might be concentrated by a $\frac{1}{2}$ " trim from the left. The tonal quality of the water is excellent. "Oven's Valley" is nicely recorded but of souvenir interest only. "Blossom Time" is somewhat diffused; apart from that, a trim of $1\frac{1}{2}$ " could be taken from the foot.

F.L., Toorak.—We like all three current entries, the landscape "Evening Light" being the most appealing in our opinion. This is worthy of a somewhat larger print with a degree of printing-in in the foreground, as the landscape area is too similar in tone to the sky. "River Gums" would come next, subject to a trim of an inch or so from the right and some tidying up of the scattered highlights on the ground by suitable control measures. "Spring Clouds" is something of a two-picture arrangement, the eye tending to oscillate between the cloud and the leaning trees.

J.M.L., Hay.—"Off the Sheep's Back" possessed the stronger possibilities of the pair, but this is a subject where supplementary lighting or flash is absolutely essential. "David" is excellent technically and a happy addition to the family album.

D.M., Lakemba.—Cloud study fair technically, but we are afraid that it must be admitted that neither the foreground nor the cloud formation possessed any degree of distinction. Cumulus clouds are normally strongly repetitive in nature and correspondingly difficult to handle with any degree of unity. Study past and present cloud portfolios.

K.M., Launceston.—The kitten subject is the most appealing of yours, but some supplementary lighting was desirable to avoid the existing heaviness—might well be tried again. Of the cloud subjects, "Clouds Over Mt. Nicholas" is most striking, but here the print is somewhat flat and the foreground not very strong in general interest. For your album take a trim of $\frac{1}{2}$ " from the foreground and try for a brighter print. "Open Spaces" is somewhat general and again would be improved by trims from the foreground and also from the left. In "Stormy Weather" the cloud formation is very confused and the scene as a whole appears to have offered very little.

G.H.M., Mildura.—Attractive technique is displayed in the landscape, but as a subject the scene is rather 'busy'; individual areas are attractive but the whole does not hold together particularly well. For your album we suggest that a number of varying trims be arranged.

K.M., Haberfield.—Congratulations on "Thunderhead"—a striking picture. "Orientale" is decoratively recorded, but there appears to be little need for the inclusion of the lower couple of inches; such a trim would bring the cat's head to the important intersection of thirds. Referring to your letter, we would say, that, at 11x enlargement, even a minor degree of camera shake would be noticeable. To decide the point, we should need to have another look at the print.

R.G.M., Broken Hill North.—Print damaged in transit owing to lack of cardboard packing. We imagine that it would be possible to obtain a very much better print from this negative; the present offering is much too light and the sepia toning has not improved matters. As the subject is theatrical in nature, a stronger degree of contrast would assist in its dramatisation.

P.E.M., Paddington.—Subject hardly suggests a storm scene but, in any case, the print has distinct possibilities thanks to foreground interest. For your album we recommend a considerably darker version, reducing the foreground detail (highlights in the tree leaves) and flashing in the top-left and top-right corners with a view to producing a more threatening cloud formation.

D.M., Morningside.—"Pottery" is the better of the two decorative arrangements, though in view of the fact that you have trimmed close on the right we feel that a similar procedure should have been followed on the left. Background is a trifle dark; had it been a little further away it would have become diffused and therefore somewhat less aggressive in its impact. Somewhat similar remarks would apply to the background of "White Carnations." Apart from that, the foreground is attractively recorded but subject on the whole suggests a commercial message rather than a pictorial one. Letter sincerely appreciated.

L.V.O., Brighton.—Congratulations on "Collins Street"—a quaint impression attractively recorded. The lighting standard on the left seems very dominating and we suggest that it be trimmed away; on the other hand, if you are keen on the standard (and the accompanying no-parking sign), we would suggest a $2\frac{1}{4}$ " trim from the right. The above would give you two interesting pictures, one with human appeal and one with the mechanical.

R.P., Mildura.—Award for "Proud Moment" mainly on the grounds of superfine print quality; considered as a subject it is really of record nature.

E.J.P., East Geelong.—Nice picture of the collie, the animal being gracefully posed—something of a rarity in canine close-ups.

M.R.P., Maylands.—Of your trio we prefer "The Old Mill"—a dramatic effect but we are still troubled by the uncompromising formality of structures of this type, their shapes being so very definite. In this case its importance could be reduced by a trim of an inch or so from the left. There appears to have been little need for the local reduction work in this area. The two storm subjects are attractively recorded, but these appear to be of record interest only. "Crash" is the better, but we would have preferred to see this dramatised rather than depicted by soft morning light. For your album take a trim of 2" from the right with a view to keeping the interest in the foreground. Too much has been included in "The Wake of the Storm"; we would suggest trims of 2½" from the left and 1½" from the top.

R.R., Moonee Ponds.—HC for "Staff of Life" which is reproduced with very superior technique—would be improved by closer trims all around with a view to developing greater impact. "Terminus" is clever, but we feel that the figure interest is too dominating although its inclusion was desirable to a certain degree. In view of the modernistic nature of the idea, you might like to consider the drastic step of a trim of 1" from the top. The cat portrait is a first-class result along conventional lines. The arrangement is a bit square-on at the moment and consideration might be given to the desirability of a twisted trim.

H.F.S., Kingaroy.—Welcome to the contest. "Study" gained HC on general grounds, but our chief comment would relate to the fact that there appears to be too much strong lighting for a subject of this type in which it is desirable to record that maximum of skin texture upon which the depiction of personality depends. For your album make a darker print and take a trim of about 1½" from the foot. Twin catch-lights are showing in your sitter's eyes; one should be spotted from each eye.

R.E.S., North Unley.—Congratulations on "Evening Strollers," which is nicely recorded and above the average for this type of subject. The half-inch or so of bright highlight at the top appears to exert too powerful an influence and we suggest a trim accordingly. The "cloud" study is really more of a tree study, the formation of the latter not being particularly striking. Considered 'as a picture' the result is quite effective.

M.S., Garden Vale.—Both cloud subjects are rather flat, suggestive of under-development—it should be possible to obtain very much better prints. "Summer Cloud" is the better subject to a trim of ½" from the foot, while in any future prints it might be possible to introduce some simple form of foreground. The aeroplane is rather lost in "Sky Riders," and we would recommend a trim of about 2½" from the right with a view to bringing the accent to the intersection of thirds. The prizewinning print on the other hand is somewhat contrasty; an effort should be made in future prints to obtain slightly more middle tone in the highlight tree trunk. Apart from that, it is a good strong result along conventional lines.

W.A.S., Croydon.—Both prints very fair embodying interesting subject matter. "Summer Skies" appealed the more strongly, but we prefer to see this in square format (taking the necessary trim from the right) and, of course, a somewhat stronger print showing more tone in the cloud formation. "Windswept" is appealing—again we believe an improved presentation would have been possible. Our recommendation would be a trim of about 1½" from the top and the reduction of the contrasts in the foreground, the latter being really too strong for the delicate tones of the cloud formation. If you do some pencil retouching on the rough print you will obtain the effect we mean.

R.W.S., Albury.—Welcome to the contest. Your initial print is slightly on the under-printed side—we always like to see a little tonal colour in the sky area. Considered as a subject, the scene did not offer you a great deal, it being mainly of a souvenir nature. For your album take trims of 1½" from the left and ½" from the top (the latter with a view to avoiding the jagged stump end) and, of course, not forgetting the richer print quality. Study the best available examples of pictorial work with a view to developing your outlook generally.

G.W., Belair.—"Approaching Storm" is the best of your set subject entries, but this and all the others of the group are marred by numerous surface scratches and defects. For your album take a trim from the top or flash in the upper area to show considerably darker in tone. "Storm Clouds" offered little and the foreground is not exactly attractive. The cloud formation in "Nightfall" is also lacking in distinction. "Eventide" would appear to owe most of its charm to colour; reduced to black-and-white there is not a great deal of appeal. Your Open entries are somewhat better, especially the pleasant HC print "Happy Days of Childhood." Here we would like to see a somewhat darker print with some subsequent reduction of scattered highlights wherever possible. Next we would place "The Ford," subject to a trim of a couple of inches from the right, as the interest tends to run out on that side. "Pastoral" is one of the difficult subjects, it being so hard to obtain a good grouping of cattle and at the same time avoid incongruous joins. The midday lighting is not altogether suitable for a topic of this type. For your album you might like to use two versions, one mostly the right-hand half and the other mainly the left-hand half. "Quiet Waters" offered very little; the right-hand half is the better.

The "A.P.R." Photographic Contests

Two Classes Monthly: "Open" and "Set Subject"
One prize only in each class to any single competitor.

Highly Commended prints which are reproduced will merit a Reproduction Fee.

Prizes by Kodak Orders are as follows:

CLASS A	CLASS B
First Prize—Value £2/2/-	First Prize—Value £1/1/-
Second Prize—Value £1/1/-	Second Prize—Value 15/-
Third Prize—Value 15/-	Third Prize—Value 10/6

Additional Prizes are frequently awarded if the quality of the entries justifies.

SET SUBJECTS 1952

March	Closes January 10 ..	"Hands"
April	Closes February 10 ..	"Australian Landscape"
May	Closes March 10 ..	"Silhouette"
June	Closes April 10 ..	"Men at Work"
July	Closes May 10 ..	"Floral and Decorative"
August	Closes June 10 ..	"Street, Road or Track"
September ..	Closes July 10 ..	"Architecture"
October	Closes August 10 ..	"Outdoors at Night"
November ..	Closes September 10 ..	"Winter"
December ..	Closes October 10 ..	"Self-Portrait"

1953

January ..	Closes November 10 ..	"Tree Study"
February ..	Closes December 10 ..	"Against the Light"
March	Closes January 10 ..	"A Study in Low Key"
April	Closes February 10 ..	"Along the Waterfront"

"Open" prints which have not won prizes may be re-entered for a Set Subject, but not for Open Contests.

Editorial Notes

PRIZE LIST FOR FEBRUARY, 1952

CLASS A—SET SUBJECT

- Second "Thunderhead," Kiki Mathews.
 Third "Freedom," B. F. Nicholas.
 (Equal) "River Cloud," R. Parsons.
 Highly Commended: G. H. Mansell, Kiki Mathews, R. Parsons.

CLASS B—SET SUBJECT

- Second "Afternoon Fantasy," R. M. Kefford.
 (Equal) "Gargoyle," Norma Brown.
 Third "Serpent's Head," H. P. Carman.
 (Equal) "The Marshes," E. G. Cubbins.
 "Storm Approaching," G. E. Nottley.
 "Sunset," G. Stott.
 Highly Commended: Noreen Burke, G. Evans, R. Ritter, P. Robinson.

CLASS A—OPEN

- Third "White Gum," M. Sheppard.
 (Equal) "Proud Moment," R. Parsons.
 "Bush Road," F. E. Bennett.
 "Pottery," D. McDermant.
 "The Midday Sun," A. Doney.
 Highly Commended: F. E. Bennett, A. Doney (2), F. Lewis (2), K. Malcolm, Kiki Mathews, R. E. Seaman.

CLASS B—OPEN

- First "The Ghost House," *M. Farrawell.
 Second "Acacia," E. G. Cubbins.
 (Equal) "Collins Street," L. V. Odgers.
 "Enraptured," G. Evans.
 Third "Scene—Windsor, N.S.W.," H. K. Hoe.
 (Equal) "Sunset on the Reef," T. F. Bodor.
 "Speed," J. Browne.
 "The Diagonals," R. M. Kefford.
 Highly Commended: K. L. Aston, J. F. Audsley, E. G. Cubbins, F. L. Elrlington, H. K. Hoe, R. A. Ible, *A. M. Johnson, R. G. Meatheringham, E. J. Plank, M. R. Pocock, R. Ritter, *H. F. Sama, G. Windle.

*Indicates new competitor.

†Indicates reproduction in this issue.

WELCOME TO NEW COMPETITORS

We extend a cordial welcome to our four new competitors whose initials are as follows: M.F. (Taylor's Arm), A.M.J. (Moonah), H.F.S. (Kingaroy), R.W.S. (Albury). One First Prize award and two H.C.'s were gained by the group.

Australia made an excellent showing at the *Mysore Photographic Society's 4th International Salon*. Acceptances were as follows: G. F. Jørrøtt (1), L. McKay (1), W. T. Owen (2), E. Robertson (2), I. Yakovenko (3).

* * *

It was pleasing to note two Australian names in the catalogue of the First International Exhibition of Pictorial Photography of Denmark (which, incidentally, was notified in our March issue). The two successful entries were: J. P. Carney (*Power and Glory*) and A. G. Gray (*Stormy Weather*).

CAPTIONS AND TECHNICAL DATA

Cover Illustration:

Fair Funnyman, C. Flaws.—Special Award, Set Subject Character Study, December, 1951. Exp. 1/25 sec., f/8, Super-XX, yellow-green filter, Kodak Pupille.

Tree Studies—Pages 77-92:

Australian Skyline, C. S. Christian.—Third (Equal), Class A, Open for March, 1951. Exp. 1/50 sec., f/8, Super-XX, K2 filter, reflex.

Hansel and Gretel, W. A. Jessop.—First (Equal), Class A, Open for January, 1951. Exp. 1/100 sec., f/8, Super-XX, folding Kodak.

Monaro Homestead, W. A. Jessop.—Third (Equal), Class A, Open for July, 1951. Exp. 1/100 sec., f/8, Super-XX, folding Kodak.

Gums, Jackson, D. M. Strout.—Second (Equal), Class B, Set Subject for July, 1951. Exp. 1/25 sec., f/11, Super-XX, yellow filter, Ensign Selfix.

Sunlit Trees, A. C. Redpath.—Second (Equal), Class B, Open for June, 1951. Exp. 1/100 sec., f/8, Super-XX, K2 filter, reflex.

Misty Morning, A. G. Gray.—Third (Equal), Class A, Open for November, 1950. Exp. 1/50 sec., f/5.6, Super-XX, reflex.

MidWinter, G. S. Harrison.—Third (Equal), Class A, Open for November, 1951. Exp. 1/50 sec., f/8, Super-XX, reflex.

Three Sisters, K. M. Walker.—Second (Equal), Class B, Set Subject for July, 1951. Exp. 1/50 sec., f/5.6, Super-XX, K2 filter, reflex.

INCREASED RATES FOR

A.P.-R. OVERSEAS SUBSCRIPTIONS

Following on the recent increases in postal charges, the following new subscription rates are now effective:

Pacific Islands and Japan (Forces)	13/-
British Isles	14/-
British Colonies	16/6
Foreign	18/6

The above information is published for general information only, as normally we are unable to accept subscriptions outside of the trading areas of Kodak (Australasia) Pty. Ltd. and Kodak New Zealand Ltd.

Sunlit Pines, L. J. Dundon.—Second (Equal), Class A, Open for September, 1951. Exp. 1/50 sec., f/8, Super-XX, reflex.

Sunny Morning, D. M. Strout.—Second (Equal), Class B, Open for September, 1951. Exp. 1/25 sec., f/11, Super-XX, yellow filter, Ensign Selfix 420.

Blue Gums, A. L. Gooch.—Second (Equal), Class A, Open for June, 1951. Exp. 1/100 sec., f/5.6, Verichrome, K2 filter, reflex.

Wyndham Landscape, C. S. Christian.—First, Class A, Open for June, 1951. Exp. 1/100 sec., f/8, Super-XX, K2 filter, reflex.

Old Figs, R. Henning.—Second (Equal), Class B, Set Subject for July, 1951. Exp. 1/25 sec., f/8, Panatomic-X, K2 yellow filter, Retina.

Death Valley, O. Truchanas.—Third (Equal), Class B, Open for September, 1951. Exp. 1/25 sec., f/16, Super-XX, yellow filter, reflex.

Rock Bound, I. H. Caldwell.—Second (Equal), Class A, Set Subject for July, 1951. Exp. 1/90 sec., f/16, Super-XX, A filter, Graflex.

A Chimneypiece, G. S. Harrison.—First, Class A, Open for November, 1949. Exp. 1/50 sec., f/11, Super-XX, yellow-green filter, reflex.

The Photographic Societies

THE PHOTOGRAPHIC SOCIETY OF VICTORIA

The last two meetings for the year 1951 maintained the high standard that has been set during recent months. On November 16th Mr. C. E. Bryant, editor of *The Emu*, official organ of the Royal Australasian Ornithologists Union, gave his fascinating address on bird photography under the title, "Getting the Bird." The beautiful hand-coloured slides with which the address was illustrated were of sufficient interest in themselves, but when to these was added Mr. Bryant's running commentary, full of interesting information and enlivened by incident and anecdote, the audience could not but feel grateful to him.

The annual exhibition and 'wind-up' social at the clubroom on December 6th proved a tremendous success. The display of competition prints submitted during the year revealed a marked improvement in quality as compared with previous exhibitions. Awards for the A Grade aggregate and for the Print of the Year went to Mr. John Fried, the latter for his beautiful print entitled "Morning on the Danube." The B Grade aggregate award went to Mr. A. Dalglish, and this carried with it promotion to A Grade for future competitions. Messrs E. H. Baxter and E. F. Stringer also were promoted to A Grade. In addition to the awards for prints, the annual colour competitions were held, with awards as follows:

Best Single Transparency: Mr. C. Arnold.

Best Set of Six Transparencies: Mr. G. Dreyfus.

Best Hand-Coloured Print: Mr. E. McBride.

The Society is indebted to Mr. John Loxton, the well-known artist, who is an honorary member, for judging the Print of the Year and the colour competitions; also to Mr. W. J. Aldus, member, for his generous donation of the prizes for these competitions.

The end of 1951 finds the Society in a very happy position as regards membership, activities and standard of pictorial work, and we are looking forward to further improvement during 1952. E.R.C.

MELBOURNE CAMERA CLUB

October 25th was the monthly general meeting and competition. "From Prints Representing the Four Seasons," which was won by Mr. A. Andrews.

On November 1st Mr. J. Frawley gave a lecture on slide-making.

November 8th was an important night at the Radio School Theatre, when office-bearers for the next year were elected. Mr. W. Broadhead was again elected President, and Messrs. H. Cleveland and G. S. Harrison, Vice-Presidents. Mr. A. Andrews is now Club Secretary.

On November 15th Mr. H. Cleveland led a debate—"Miniature *versus* the Rest"—which produced much lively discussion.

The club's Third Exhibition was held in the Kodak Gallery on November 22nd, Mr. Athol Shmith providing the print criticism.

November 29th proved a popular night when Mr. J. Scott gave an informative talk on "Flash Photography."

An invitation is open to all Melbourne photographers to visit the clubrooms, 2nd floor, 123 Little Collins Street. B.F.N.

BALLARAT CAMERA CLUB

On December 5th, Mr. C. Jackman took several members to the darkroom to develop a film; he then followed with a demonstration on the use of the enlarger.

This gave the committee a free rein to meet and make arrangements for Christmas festivities. These were accomplished with the aid of a special committee comprising Mrs. Strange, Mr. Evans and Mr. McConnell.

As a result, the following Wednesday, December 12th, saw the clubrooms gay with coloured streamers, balloons and masses of flowers.

Photography was forgotten while members, their children and friends, played party games or were entertained with monologues by Mr. L. Evans and Mr. Harold Cox. Mr. McConnell, as a "Mystery Man of the East," produced the most unexpected things from unexpected places. A delightful supper was served at flower-bedecked trestle tables, and included traditional hot Christmas pudding.

December competitions were postponed until the January business meeting held on January 23rd. M.S.

WEST AUSTRALIAN CAMERA CLUB

At the meeting held in the clubroom on Thursday, 22nd November, 1951, the subject of the evening was "Clouds Only"—no foreground to the picture being allowed. This subject, however, did not prove to be very popular, as not too many prints were exhibited. The winners of the points were:

1, Mr. Pryor; 2 and 3, Mr. Palmer.

Our guest-speaker for the evening was Mr. Glasgow, F.R.P.S., who gave a talk on "Photographic Reminiscences." He commenced by saying that the object of every member of a photographic club was to produce work which will give pleasure to himself and to his friends. He considered that the main point to remember was to make the camera our tool and not allow the camera to get the better of us, which meant, he said, that it was not necessary to buy all the accessories—in fact, our aim should be to get the substance rather than the shadow.

During his talk, Mr. Glasgow showed the members many photographs selected from his own collection.

The speaker dealt very shortly with processing and finishing of prints, and followed with a brief description of how his own London studio had been conducted.

The President, Mr. Sunter, thanked Mr. Glasgow for his most interesting and instructive talk. A.M.P.

KINGAROY AND DISTRICT PHOTOGRAPHIC CLUB

The club held its final meeting for the year on December 11th. The set subject, "Storm," was contested by all members and resulted: A Grade, Mr. F. Sama; B Grade, Mr. A. E. Eyres. Winning members of the aggregate points contest were: A Grade, Mr. A. A. Atkins (126 points); B Grade, Mr. A. E. Eyres (159 points).

Election of office-bearers resulted: President, Mr. F. Sama; Secretary-Treasurer, Mr. P. Holden; Committee, Mr. R. W. Sollay, Mr. I. Brodie; Advertising Secretary, Mr. A. E. Eyres. P.W.H.



Judges at work on the Adelaide Camera Club's Sixteenth Annual Exhibition are (from left): Messrs. Geoff Dickson, Hugo Keil, A.R.P.S., and Keith T. Cook. (Photograph, Keith T. Cook.)

ADELAIDE CAMERA CLUB

The club outing in November took the form of a pictorial picnic to the hills near the Mt. Bold Reservoir. A nearby farm provided a rural backdrop for many and varied farmyard scenes. Local models were most co-operative, and enjoyed the activities as much as the members.

A "Colour Night" was held at the clubrooms on Monday, 19th November. A colour slide competition drew sixty-seven entries and awards were given to Messrs. Jack Tomlinson, Doug. Wolff, J. Windle and G. Mazure. The judges were Miss Robertson, Mr. E. Robertson, and Dr. R. J. Best.

Dr. R. J. Best projected a series of colour slides and commented on his recent world trip, much to members' enjoyment.

The winning colour slides in the Adelaide Camera Club's International Colour Salon were also screened as a preview for members. The night was an outstanding success, and was greatly enjoyed by the eighty members and friends present.

Monday, 3rd December, saw the opening of the Club's Sixteenth Annual Exhibition of Pictorial Photography and First International Colour Salon in the Royal South Australian Society of Arts Gallery on North Terrace. The show was officially opened by Mr. John O'Grady, the American Vice-Consul. It was estimated that three hundred people attended the opening. The exhibition was well received by the press.

The judges of the Exhibition were Messrs. Hugo Keil, A.R.P.S., Geoff. Dickson, and Keith T. Cook.

The judges for the Colour Salon were Messrs. Jack Tomlinson, E. Newsham, and Doug. Wolff.

K.T.C.

PRESTON PHOTOGRAPHIC CLUB

November's second meeting, held on the 19th, provided a most interesting viewing of Kodachrome slides screened by an old friend of the club, Mr. Jim Henderson. These were exposed by Mr. Henderson and Mr. Ray Frost during a trip made along the Eastern Australian coast to Cairns, across the continent to Darwin, back through Alice Springs to Adelaide, and then home to Melbourne. What a wealth of colour is present in tropical scenes and the surroundings of Alice Springs!

The experience of the two photographers was very evident in the quality of the transparencies. During the screening, Mr. Henderson gave a most entertaining commentary on all phases of the journey.

November was notable, too, for an event which rarely takes place—a combined outing of three clubs—the Healesville Camera Club, the Photographic Society of Victoria, and the Preston Photographic Club. The outing, although not productive of very many photographs, was a most enjoyable social 'get-together,' and an opportunity for exchange of much photographic chatter.

On December 3rd, the club held its annual exhibition of members' work, and about one hundred prints were hung on the clubroom walls.

The annual award night and social evening was held on December 17th, when a very pleasant 'get-together' was spent by about seventy members, friends and children. Entertainment was provided by films, mainly cartoons for the kiddies, projected by Mr. W. Thompson. Awards for the year were as follows:

A Grade Aggregate (Thompson Shield): F. P. Hion.

B Grade Aggregate (Sharp Cup): G. Earl.

Print of the Year: F. P. Hion.

Most Consistent B Grader: G. Sim.

Special Club Night: J. N. Lee.

Following an excellent and plentiful supper, the President (Mr. Baxter) expressed thanks to those who had helped in the success of the evening, and wished all attending the season's compliments.

The Preston Photographic Club has a good programme in hand for this year, and interested photographers should contact the Secretary, Mr. M. M. Baker, at 14 Haig Street, West Heidelberg. E.H.B.

CAMPSPIC CAMERA CLUB

The meeting held on 28th December, 1951, in the Dispensary Hall, Campsie, brought forward a large number of prints for the Open competition. Mr. K. Douglas once again secured first, second and third places in A Grade. He won the point-score cup last year and, as will be seen by the point-score hereunder, is well on the way to keeping it for 1951-52. B Grade resulted in: 1, R. Lee (new competitor); 2, J. Bremner; 3 (equal), Miss N. Edmondson and R. Greene.

The three point-score leaders in each division at the last meeting are as follows:

A Grade—K. Douglas, 48; B. Davis, 15; C. Hannaford, 4; R. Kelly, 4.

B Grade—R. Greene, 14; M. Wiseman, 13; J. Bremner, 13; R. Lee, 9.

Any photographer, or any person interested in the Campsie Camera Club, will be made welcome at the clubrooms on every fourth Friday night at 7.30 p.m. R.C.G.

NORTHERN TASMANIAN CAMERA CLUB

At the meeting held on December 4th, 1951, it was decided to hold a photographic exhibition, which will be the first display of locally produced photographs since the war.

A committee of three was elected to organise the exhibition. These are: Messrs. J. W. Ikin, L. K. Hughes, and B. Widdowson.

It is planned to hold the show early in April, and the place will be the Queen Victoria Museum. All Tasmanian amateur photographers are invited to send in prints, while it is hoped that both Devonport and Hobart Camera Clubs will submit club portfolios. Standard mounts—12 x 16 or 16 x 20—will be insisted upon. The meeting decided that a prize for the best print should be donated.

On the same night as the exhibition there will be a screening of colour slides, which will be open to the public. Further details are available from the Hon. Secretary. Press Correspondent.

"Erith on Pictorial Photography"

Is there anything more to be said about pictorial photography? We are quite justified in asking ourselves the question, but there can be no possible doubt about the answer. Not only is there much more to be said, but it is quite certain that there will be thousands of reams of paper used in the saying of it. The subject of pictorial photography is capable of endless discussion; it is a perennial question mark, and the angles from which it can be discussed are innumerable. All that being admitted, it is not strange that, comparatively speaking, there are not so very many good books on the subject? Looking through the book-lists published in the *B.J. Almanac* for the last fifteen years the only book listed is F. C. Tilney's "Principles of Photographic Pictorialism." This is really rather remarkable but it does emphasise the necessity for a great welcome for the book just published, namely, "Erith on Pictorial Photography." Those of us who have, or have not read John Erith's earlier book, "Erith on Portraiture," will have no doubts as to the character and quality of his latest work. It might well be said that today pictorial photography stands at the parting of the ways, for it is beyond doubt that in the quite near future it will be colour photography that will usurp monochrome in pictorial work, and how great a revolution that will involve is recognised by very few indeed at the moment. That the change will be fundamental is without doubt, and that makes it imperative that we should immediately study the very foundations of pictorial photography, should analyse methods and present results with vastly more attention to detail than we have hitherto employed. To do that, even superficially, calls for a guide, and now we have it to hand in Erith's latest book. Not only is it the content of the work that is outstanding, its scrupulous care, respect for *minutiae*, and sound treatment of the broadest aspects of the subject, but above all the spirit in which it is presented. Had he chosen as his title the "Philosophy of Pictorial Photography" he would have been thoroughly justified, for that is what he has produced. In the Preface he tells of his early interest in drawing and painting and, with complete candour, of his failure successfully to reproduce his conception of a subject, of the summary dismissal by the then head of a famous school of art, the abortive attempt to become a business man, and the year of intolerable despondency, and then escape by means of an introduction by the late Furley Lewis, Hon. F.R.P.S., to the head of the Polytechnic School of Photography at that time, the late A. J. Lyddon, who was succeeded by L. J. Hibbert, and to whom John Erith pays a tribute for his tuition and encouragement. Incidentally, the Foreword to this book is by L. J. Hibbert.

It is of importance to note that Erith completed the two-year course at the Polytechnic in just over twelve months and took first place in the final examination. He admits that he gained "a sound grasp of the principles of composition; a working knowledge of anatomy, understanding of the influence of lighting upon modelling; relief, and texture; and had learned to focus attention upon the significant elements of a given subject." A most useful epitome of the minimum equipment essential to a would-be photographer. Erith separates and quietly emphasises another important quality, the knowledge of the difference

between mere technical virtuosity and true creative ability, and admits, with characteristic humility, that his own work had so far given but modest evidence of either of these qualities.

His technical training was supplemented by experience in many branches of photography working under photographers in the West End of London of that day, and finally he opened his own studio and then practised as a portrait photographer. In the next twenty years he became a fairly regular exhibitor at International Salons at home and abroad, and his work included both portrait and pictorial work. The latter he chose as a relaxation, and for this, among other reasons, he was drawn to the more restful subjects rather than to scenes of human activity or achievement.

Now in this book he sets down the conclusions that seem of weight and value to him in the light of the training and experience he describes, and hopes that they may dispel some of the confusion of thought that exists, particularly in the minds of younger workers, as to the function and status of pictorial photography.

The book proper comprises five sections, first the photographer, then the photograph in monochrome, next the photograph in colour, then your questions answered on pictorial matters. There is also an appendix which supplies first an abbreviated classification of applied photography, and a comparison between freehand and photographic media. For illustrations there are forty-eight plates, several of which carry two or three pictures, and there are also quite a number of line drawings in the text.

In his chapter on the photographer, Erith has provided what he calls a rough analysis of the main types of photographer today. This results in eight main groups, as follows: Button-pressers, Gadget Fetishists, Hit or Miss Optimists, Theoretical, Technical, and Gadget Dabblers, One Operation Experts, Stunt merchants and imitators, Pseudo-photographers and Arty-Crafties, Expert Craftsmen, Technicians. Not only are the types described carefully—some may think too carefully—but they are illustrated by drawings which in some cases are reminiscent of Heath Robinson or even hark back to George Cruikshank. Do not be misled by this statement into thinking that Erith has been enjoying himself at the photographers' expense. There is, admittedly, an element of enjoyment in his analysis, but it does reflect his careful, indeed thoughtful, analysis of the types he describes and depicts. What is more, his account of the development of the more advanced types of gadget dabblers by way of gadgets and dabbling is quite masterly.

There is no doubt whatever that the "power" which Rabbie Burns coveted and longed for, "To see ourselves as others see us," is abundantly possessed by Erith, and that auto-analysis and introspection have provided no small part of his deductions and examples. Surely his justification of his types is witness to this and to his innate honesty and clear sightedness. Having, perhaps, somewhat mercilessly dissected the photographer, it is natural to pass on to the photograph itself and consider it as a medium for artistic expression, taking the monochrome photograph first. At once the question of control arises. How far, in other words, it is permissible to supplement the very limited control possible by the camera, or by variation of the

"Erith on Pictorial Photography," by John Erith, F.I.B.P., F.R.P.S., The Fountain Press. (Stocks arriving shortly).

The 'Last Page'

The success of the proposed New Zealand Amateur Photographic Convention appears assured—not that that was to be doubted in view of the fact that the Convention is being sponsored by the Christchurch Photographic Society and that the chief organiser is F. L. Bowron. The function is to be held at Queens-town (South Island) over the period 24th to 30th April, 1952, and it is anticipated that there will be an attendance of about one hundred enthusiasts.

Merton Potter tells us that he has now moved from Kandos to Rylstone, where he is professionally engaged on his own account.

"Erith on Pictorial Photography"

photographic processes themselves by what can be called freehand mediums. This is very cleverly answered, firstly by the second part of the Appendix, which contains a comparison between freehand and photographic media and indicates the relation of the photographer to the freehand artist.

It is not our place, nor have we space, to give Erith's masterly discussion of the very vexed question of control and its ethics; we must be content to say that his conclusions appear to us very sound, and he shows that the subject is vastly wider than a mere matter of deciding whether this or that control shall be indulged in, and that true control for the photographer comprises much more careful selection than any alteration or addition to what purely photographic methods can give.

For the chapter on the photograph in colour we have nothing but praise. His analysis, right at the outset of his discussion of the subject, of the difference between colour photography and work in monochrome is masterly and does provide the really useful approach to the subject. It should be read again and again, for in it will be found not only the analysis just mentioned, but in particular that outstandingly important factor the "Human Element." In a nutshell you have "Not only is the eye an unreliable instrument for the evaluation of colour, but once again the mind interprets and deception enters in." No one who has done any colour photography will find fault with that statement, nor with another, apropos of portraiture in colour: "Even though the various colours are accurately reproduced the photographer may still be open to adverse criticism because the sitter or his friends have formed an inaccurate impression, due to defective colour vision or psychological influences."

The last two chapters dealing with questions on technical and pictorial matters are entirely excellent and provide major justification of our claim that in this book we have a philosophy of pictorial photography. Like the rest of the work they are full of mature experience and knowledge. Perhaps they display more of that remarkable intuition, that power of judging what other folk are thinking about, which characterises John Erith and enables him to provide unique guides to his own chosen subject. They, like the rest of the book, will bear, nay command, re-reading time and again, for not only are they full of wisdom and good advice, but they cover so tremendous a field. In this new work and in his "Erith on Portraiture" we have two unique achievements.

The British Journal of Photography, October 26, 1951.

Gleaned by Monte Luke, F.R.P.S., who considered the paragraph worthy of a wider audience:

"To make pictures by photography involves judgment and taste, and these mental activities open the door of many an avenue yet untrodden by the votary of the camera. Along these vistas the intrigued one passes without realising point by point how much wisdom and merit he is acquiring. Imperceptibly his faculties are being sharpened; he is seeing far more in Nature and Life than he ever supposed was there. A gradual maturing of the spirit is particularly potent in the avenue of Art, along which the enthusiast proceeds even while he is with modesty, either assumed or commendable, disclaiming every ambition in that direction. He is, nevertheless, always subconsciously aware that he is a fuller man, a keener observer and a better thinker in many ways than he formerly was, and he comes justly to associate this wider and more brilliant outlook on the world with his hobby and its beneficence. In such cases, artistic photography becomes an absorbing passion."

On 20th December C. Flawes and O. Truchanas received their A.P.-R. Character Study awards in the shape of Dr. Julian Smith "Fifty Masterpieces" portfolios at the hands of the local Hobart management at a function specially arranged for the occasion. Office-bearers of the Southern Tasmanian Photographic Society also accepted invitations to be present for the celebration.

During January the Director of the Australian Museum, Sydney, arranged yet another fine series of afternoon screenings of educational sound films for school children. The films were effectively screened by Museum photographer Howard Hughes.

E. R. Rotherham's fine picture "Tawny Frogmouth" (A.P.-R. cover illustration, Jan., 1952) was an acceptance at the 1951 Louisville (U.S.A.) Salon of Nature Photography, and subsequently gained reproduction in the local newspaper, along with a feature story covering the Salon.

A Kodak loan collection of colour transparencies, including duplicates from the 16th Kodak International, was screened at a special session of the Photographic Section of the Fiji Arts Club on December 17th/18th.

Extract from a recent Press Release from the *Museum of Modern Art* (N.Y., U.S.A.):

"The term 'abstraction' used in connection with photography is hardly more than a convenient handle with which to tag a wide range of intelligent artful experimentation as well as the significant creative achievements.

"The discipline of an enforced objectivity in laboratory photography is countered by the creative control of selection exercised by the photographer. The aesthetic factor in the scientific photograph is read or imagined into it by the observer. The creative photographer initiates the aesthetic factor.

"A cloud chamber photograph showing disintegration and conversion under bombardment of one hundred million electron volt neutrons from the giant University of California cyclotron, and a photograph of a fragment of a wall by Frederick Sommer, both represent a reality and both convey a feeling of immutable force and power that goes beyond the actual facts of the photographs. In the one, this feeling is incidental to facts portrayed; the other originates in the perception and creative ability of a major American artist in photography."

Two attractive photographic exhibitions were on display in David Jones' Galleries (Sydney) over the period January 8th to 22nd. These were the British Overseas Airways Corporation Exhibition "A World Studio For You" and the publicity group "Yugoslavia Through the Eyes of the Camera." No doubt both of these shows will shortly go on Commonwealth exhibition—neither should be missed.

* * *

A small loan collection of *A.P.-R.* prizewinning prints, which happened to be in the possession of Dr. Thomas, F.R.P.S., F.P.S.A. (Bangalore), was forwarded by him to the Second International Salon of Pictorial Photographic Art, recently organised by The Club of Gujarat Pictorialists (Ahmedabad, India). From the portfolio in question, the judges selected two prints by S. H. Lofts and one each by J. Hoey and K. J. Mierendorff.

* * *

Only one Australian worker was successful in the 1951 *Popular Photography* (U.S.) Contest. This was McKay Whittle, who gained a twenty-five-dollar award for his entry "Creation by Mother Nature."

* * *

Sydney *Sun* for January 22nd carried a lengthy feature story by Gil Heming on the subject of visiting *Vogue* photographer, Anthony Denne. During his seven weeks' stay in Australia, the visitor is planning to make 'a complete documentary coverage of the Australian way of life.' He is stated to be "equipped with sensitised material for 3,000 exposures."

* * *

From overseas comes news that microfilming is now being used to expedite the issue of books from public libraries. Said a prominent librarian: "It always seems a mistake for professionally trained men and women to spend so many hours in routine card-stamping duties behind the desk when they should be talking to, and advising readers at the shelves."

* * *

The Editor hopes to meet a group of *A.P.-R.* friends in Newcastle on the evening of February 12th. An attractive colour programme is being arranged for the occasion, supported by one-man-shows in black-and-white from Clarence B. Young, A.R.P.S., A.P.S.A. (*Colourful Nondugl*) and Alan Queale (*Panorama of Japan Today*).

* * *

ACKNOWLEDGMENT OF GREETING CARDS

The Editor desires to acknowledge receipt of the following greeting cards, the majority of which were of pictorial or ingenious photographic nature: F. E. Bennett, Canberra Photographic Society, M. Challenger, Molly Collier, A. F. D'Ombrian, C. K. Henshall, J. Hoey, Institute of Victorian Photographers, H. Jay, Manning Camera Club, Manly Camera Club, W. H. McClung, Newcastle Photographic Society, R. J. Parsons, Dorothy Peach, S. C. Piper, R. Ritter, Ainslie Roberts, and Sunraysia Camera Club.

* * *

During the month of January the Kodak Salon Gallery in Sydney showed Alan Queale's fine one-man-show "Panorama of Japan Today," which is later to be shown in Brisbane. Sydney's next exhibition will be the 'Shell' feature "Photography in the Service of Horticulture."

SOUVENIR OF FEDERATION
(The score-board at the old 'S. M. Herald' office)
F. T. CHARLES

CANBERRA PHOTOGRAPHIC SOCIETY

A trial of holding both a set subject and an open subject together at monthly competitions (as with *A.P.-R.*), but on each alternate month, proved successful for November and will be continued. The purpose was to enable members to enter prints for open competitions when the set subject for any month did not appeal. This first occasion almost doubled the total number of prints normally entered.

Awards for October (Open) were: 1, "Intake" (C. L. Leslie); 2 (equal), "Fay" (Mrs. M. Cooper) and "Forest Frontier" (K. Dinnerville); 4, "Me and My Shadow" (C. L. Leslie); 5, "Just Fiddling" (Mrs. Cooper).

The November awards were: Set Subject (Child Study)—1, "Concentration" (C. S. Christian); 2, "Young Bacchus" (C. L. Leslie); 3 (equal), "Daily Devotion" (C. L. Leslie) and "My Doll" (C. S. Christian); 5, "Great Expectations" (Mrs. Cooper).

Open (November): 1, "By Wyndham Marshes" (C. S. Christian); 2, "Sunset Silhouette" (A. C. Redpath); 3 (equal), "Homestead Hollow" (K. Dinnerville) and "Pine Island" (C. L. Leslie); 5, "Bush Bathroom" (K. Dinnerville). A.C.R.

SOUTH AFRICAN PHOTOGEMS of the year 1952

Edited by Dr. A. D. Bensusan, F.R.P.S., F.P.S.A., featuring thirty full-page reproductions of current South African pictorial work and fine series of topical articles.

Copies may be indented through any Kodak Branch or orders placed direct with the publishers: The Photo Publishing Co. of South Africa, Box 9612, Johannesburg South Africa.





Outdoor boardings throughout N.S.W. are carrying an important message: 'The camera caught her charm... but the X-Ray may save her life.' The sponsor is the Tuberculosis Division, N.S.W. Dept. of Health.

G. Grant-Thomson is currently receiving congratulations on his election to the Associateship of the Royal Photographic Society of Great Britain. The recognition was granted on the basis of his well-known natural history photography.

'Gum-Bichromate' seems to be in the news once again, which is by way of a minor triumph in popularity for this process, which was first discovered in 1858. Up-to-date details may be found in the *P.S.A. Journal* for October, 1951.

The *A.P.-R.* cover design for the current year was a joint affair. The basic lettering style was designed by good friend Ainslie Roberts, while the overall arrangement came from designer Les Jordan.

From D. McDermant (Brisbane): "Pleasant news to me was the receipt of the December issue of *The A.P.-R.* with the reproduction of 'Who, Me?' amongst such fine photographs. J. R. Hopkins' 'The Sculptor' must certainly have been a most satisfying print to see in the original. I was more than happy at obtaining a Special Award and am looking forward to receiving my portfolio.

"I also enjoyed the article and reproductions on Australian history. One does not realise how many documents, etc., relating to our early days still exist and in such a good state of preservation."

More news from the Rev. A. H. M. Ellison, Methodist Overseas Mission, Goulburn Island:

"I thank you for your letter of 3rd October—your remarks with regard to *The A.P.-R.* and its mailing are appreciated. Did I tell you that on our small island, 250 miles from Darwin by sea, there are (when we are all home) only five white adults and four white children (the Ellison scamps).

"The native people of Goulburn Island are a fine group. They are, of course, Australian aboriginals, and many of them are becoming increasingly interested in books. The *A.P.-R.* does the rounds and the photographs are subject to many comments. Two of our young men are anxious to start photography, and I hope soon to be able to procure a couple of simple sturdy cameras for them. Who knows, we may even

be able to send contributions to the *A.P.-R.* from the 'Goulburn Island Camera Club' one of these days!

"I have been using a Semm-Kim II 24 x 36mm. for both Kodachrome and black-and-white. The results have given us much pleasure, while the islanders are always overjoyed to see themselves on the screen. I have a 35mm. Aldis projector, and it gives excellent projection. Our power on the island is 12-volt, and we use a Hannan 'Freelite' as our source of electricity.

"The island is rather barren, but hard work brings good results, and we are able to grow glorious crops of paw paws, pineapples, bananas, sweet potatoes, yams, tomatoes, corn, sorghum, etc. All this goes to make Goulburn Island a real home.

"We are away from the beaten sea lane and have no regular shipping; our own luggers, which also service the Mission's four other stations in Arnhem Land, make trips to Darwin from time to time for supplies. An occasional aircraft drops in, and we are beginning to have regular visits from the aerial ambulance of the Northern Territory Air Medical Service.

"Just after the war transport was really a major problem, but affairs are becoming more organised now. There were occasions in 1947 when we had mail only once in three months.

"Our womenfolk are doing a great job, and we are proud of them, for they have the true pioneer spirit—they make the work in Arnhem Land a really positive thing."

From H. A. Tregellas comes recent news regarding the Australian section of the Stereoscopic Society now approaching its sixtieth year. Amongst its other activities, the Society circulates monthly sets of stereoscopic prints and colour transparencies. The colour transparency section is now in its second year, and an international colour portfolio is planned for circulation at an early date. Enquiries should be addressed to: Hon. Secretary, Australian Section, The Stereoscopic Society, 143 North Road, Elsternwick, S4, Vic.

Enthusiasts in the West Wyalong district should not fail to look up R. M. Bentley (late B.C.O.F., Japan), who has now settled in business in that city.

*Built for
Service and
Reliability . . .*

WASP ENLARGERS

Models III and IIIA

Excelling in performance, craftsmanship, and hard-wearing qualities, these famous enlargers are filling an urgent need in both the amateur and professional fields.

In design and operation both models are the same except that the Model III will accept negatives up to $3\frac{1}{2}$ " x $4\frac{1}{4}$ ", whilst the Model IIIA will accommodate 4" x 5" negatives.

Both models are fitted with $5\frac{1}{2}$ " Wray "Supar" f/4.5 lenses, although independent lenses can be used if necessary. A very ingenious built-in masking device permits any different sized negative or portions of negatives to be masked off in a matter of a few seconds. Prints up to 16" x 20" are obtainable on the baseboard, whilst the bellows extension is sufficient to allow reduction prints to be made.

A special new and exclusive feature of the Wasp Enlargers is the ball-and-socket lamp adjustment, allowing the lamp to be raised, lowered or moved to any angle without the use of screws.

OTHER SPECIFICATIONS ARE:

Strong rack and pinion vertical movement; well-ventilated lamphouse; friction-drive focusing; optically ground and polished 6" double plano-convex condenser; red safety filter; 36" high 2" steel column; 21" square laminated plywood baseboard; for use with 100-watt lamp (not supplied).

PRICES:
(with lenses, without lamps)

Model III, £91/4/3
Model IIIA, £100/8/-

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Simplicity, plus the assurance of really tip-top pictures, is the success secret of this world-famous camera. Just load, aim, and shoot for large sparkling snapshots made in the simplest possible way.



- 1. Focus is fixed. No need to adjust for distance.**
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- 3. Push-button shutter release reduces possibility of camera shake.**
- 4. Two extra-large viewfinders—so clear, brilliant, and easy to see.**
- 5. Sound metal construction throughout plus Kodak reliability.**
- 6. Top quality Kodak Meniscus lens for needle-sharp pictures.**
- 7. Built-in lens hood for better against-the-light pictures.**

Loads with Kodak V620 film for 8 pictures, $2\frac{1}{4} \times 3\frac{1}{4}$ ins. Price: £2'6'3

ENSIGN FUL-VUE

MODEL II

Your old favourite with the latest ideas . . . all designed to simplify picture-making and yield crisp, clear, satisfying snapshots.

1. So smartly styled—a truly exciting camera to give or to receive. Ideal for that special gift.

2. Unique design permits brilliant viewfinder to show big, clear picture image.

3. Perfected 3-position Ensign lens allows wider focusing scope (2yds., 3-5yds., 6yds.-inf.)

4. Flash-synchro. shutter for indoor action shooting; also has regular I and T settings.

5. Safety cover over ruby viewing window for use with fast Kodak Super-XX film.

6. Strong all-metal body will serve a lifetime; plastic shoulder strap for safety.



Price:

£3/16/3

Loads with Kodak V120 film for 12 pictures, $2\frac{1}{4} \times 2\frac{1}{4}$ ins.

SALE OF USED APPARATUS AND LENSES

KODAK STORE, 379 George Street, Sydney

CAMERAS

- 4714—Photo Productions camera, $4\frac{1}{2} \times 6\frac{1}{2}$, Stylor f/1.5 coated lens, 6 D/D slides, tripod, £15
- 4763—6 x 6cm. Uniflex, twin lens reflex, f/4.5 coated lens, flash equipment, filter, hood, tripod (with B. & S. head), always-ready case, £23/10/-
- 4781—Retina II, 24 x 36mm., Xenar f/2 lens, Compur-Rapid shutter, coupled rangefinder, always-ready case .. £60
- 32—Rolleiflex, Tessar f/3.5 coated lens, Compur-Rapid shutter, always-ready case .. £80
- 51—Six-20 Kodak "A", $2\frac{1}{2} \times 3\frac{1}{2}$, K.A. f/4.5 lens, 8-speed shutter .. £20
- 61—Voigtlander Vito III, 24 x 36mm., Ultron f/2 coated lens, Compur-Rapid shutter, coupled rangefinder, always-ready case .. £60
- 72—Ensign Selfix 820, Ross Xpres f/3.8 coated lens, 8-speed Epsilon shutter, 3 filters, close-up lens, case .. £28
- 75—Kodak Suprema, $2\frac{1}{2} \times 2\frac{1}{2}$, Xenar f/3.5 lens, Compur-Rapid shutter, case .. £22
- 87—Foca Mod. IV, 24 x 36mm., Oplar 5cm. f/2.8 coated lens, slow speeds, synchro for electronic flash, always-ready case .. £71
- 91—Contax Mod. III, 24 x 36mm., Sonnar f/2 lens, built-in exp. meter, Ross Definex $3\frac{1}{2}$ " f/3.5 coated lens, always-ready case .. £124
- 2751—Kodak 35, coupled rangefinder, K.S. f/3.5 lens, 5-speed shutter, flash gun and lead, always-ready case .. £60
- 4712—Kine Exakta, Exaktar f/3.5 lens, slow speeds, always-ready case .. £62/10/-

SUNDRIES

- 4886—Leitz rapid wind for Mod. III Leica, £6/15/-
- 4887—Leitz Vitom universal finder, case .. £16
- 16—Palec electric exposure meter, case .. £8
- 207—Plano convex two-condenser lenses, $3\frac{1}{2}$ ", metal mount .. £2/15/-
- 208—Pullin 2" x 2" slide and strip projector, 100mm. f/2.8 ctd. lens, leads, 250-watt globe, case, £35

LENSES

- 4420—Dallmeyer Popular telephoto, 10", f/6, £9/10/-
- 4425—Dallmeyer Serrac Portrait, 10", f/4.5, flange. Price .. £22
- 4429—Ross Homocentric wide-angle, $4\frac{1}{2}$ ", f/6.8, flange .. £9/10/-
- 4430—Ross Resolux coated enlarging, 11cm., f/4, £16
- 4434—Trinol Stewartry, 105mm., f/3.5, for Leica cameras .. £27/10/-

CINE

- 101—Cinevox Silent 8mm. projector, 1-in. f/1.9 projection lens, built-in transformer, leads, plug, case, instr. .. £70/10/-
- 103—Eumig 8mm. cine camera, f/1.9 coated lens, built-in exposure meter, take-up spool, £60
- 109—Paillard Bolex 16mm. cine camera, 100ft. spool loading, Trioplan f/2.8 lens, Kino Plasmal f/1.5 lens, Trioplan f/2.8 lens, reflex viewfinder, cable release, lens caps, instr., carrying case .. £253
- 4894—Kodak Anastigmat 63mm. f/2.7 lens and mount for 16mm. Cine-Kodak cameras .. £37/10/-
- 4284—Som-Berthiot Cinor telephoto lens, 75mm., f/2.5 .. £40

KODAK STORE, 386 George Street, Sydney

CAMERAS

- 4253—Rolleiflex Automat, Tessar f/3.5 lens, 2 filters, cable release, lens cap, always-ready case, £85
- 4227—Rolleiflex, lever wind, Tessar f/3.5 lens, case. Price .. £50
- 4208—Agifold, f/4.5 coated lens, always-ready case, £20
- 4257—Foth Flex, f/3.5 lens, always-ready case, £35
- 1844—Gamma, 24 x 36mm., f/3.5 lens, £37/10/-
- 4252—Kodak 35, f/3.5 coated lens, always-ready case .. £42/10/-
- 4251—Leica IIIC, Elmar f/3.5 coated lens, lens hood, yellow filter, always-ready case .. £110
- 4103—Leica IIIB, Summar f/2 lens, lens cap, always-ready case .. £105
- 4205—Leica III, Summitar f/2 lens, always-ready case .. £80
- 4203—Ensign Cameo, $2\frac{1}{2} \times 3\frac{1}{2}$, Tessar f/4.5 lens, 4 slides, roll holder, F.P.A., W.Z. tele. and copying attachments, case .. £37/10/-
- 4177—Super Ikonta, $2\frac{1}{2} \times 3\frac{1}{2}$, Tessar f/4.5 lens, case. Price .. £40
- 4112—Kodak Vollenda, f/4.5 lens, Compur shutter. Price .. £18/10/-
- 4083—Ensign Commando, f/3.5 lens, always-ready case .. £40
- 4200—Voigtlander Bessa, Voigtar f/6.3 lens, yellow filter .. £11
- 4123—Voigtlander Bessa, Skopar f/3.5 lens, £26/10/-
- 4122—Baby Super Ikonta, 16 on 120, Tessar f/3.5 lens, always-ready case .. £40

KODAK STORE, 37 Rundle Street, Adelaide

CAMERAS

- 646—Ensign Commando, Ensar f/3.5 lens, 8-speed Epsilon shutter, coupled rangefinder, double exposure prevention, 12 or 16 exp. on 120 film. Perfect order .. £46 10/-
- 708—Six-20 Kodak A, Anastar f/4.5 lens, 4-speed Epsilon shutter (1/25th sec. to 1/150th sec. T. & B.). Perfect order .. £18 10/-
- 831—1A Pocket Kodak, single lens, 8 exp. 2½ x 4½ on 116 film. Good order .. £4 17/6
- 870—Korelle Single Lens Reflex, Schneider Xenar f/2.8 lens, set of four extension tubes, always-ready case. Good order .. £52 10/-
- 887—Ensign Auto-Range, Ensar f/4.5 lens, coupled rangefinder, 8-speed Epsilon shutter, 12 or 16 exp. on 120 film. Excellent order, £36 10/-
- 906—Retina II, 24 x 36mm., Schneider Xenon f/2 coated lens, Compur-Rapid shutter, always-ready case. Excellent condition .. £65
- 912—Six-20 Brownie C, built-in yellow filter and portrait attachment, flash synchronised, 8 exp. on 620 film. Good order .. £1 15/-
- 915—Ensign Selfix 820, Ensar f/4.5 coated lens, 8-speed Epsilon shutter, flash synchronised, 8 exp. or 12 exp. on 120 or 620 film. Perfect order. Price .. £21 10/-
- 923—Ensign Ranger I, Ensar f/6.3 lens, 3-speed Trikon shutter, 8 exp. 2½ x 3½ on 120 film. Perfect order .. £11 18/6
- 924—Rolleicord Twin Lens Reflex, Zeiss Triotar f/3.5 lens, Compur-Rapid shutter to 1/500th sec. and bulb, automatic wind, always-ready case. Perfect order .. £30.

CINE

- 811—8mm. Cine-Kodak camera, Model 20, f/3.5 lens. Good order .. £35

SUNDRIES

- 896—NI light yellow filter for Retina II. Perfect order .. £1 8/6

KODAK STORE, 250 Queen Street, Brisbane

CAMERAS

- 8806—Ensign Auto-Range, f/4.5 lens, coupled rangefinder, case .. £33
- 8577—Ensign Commando, coupled rangefinder, f/3.5 lens, case .. £50
- 8947—Ensign Selfix 420, f/4.5 lens, four-speed shutter, Series VI adapter, filter, portrait lens, exposure guide .. £15 10/-
- 8812—Ensign 16-20, f/4.5 lens, portrait lens, case, 3 filters .. £19 10/-
- 8710—Wirgin, 35mm., f/2.9 lens, portrait attachment, case .. £21 15/-
- 8935—Six-20 Kodak A, f/4.5 lens, four-speed shutter, filter, hood .. £18 10/-
- 9131—Retina II, 24 x 36mm., coupled rangefinder, f/2 Rodenstock lens, case .. £55

- 7115—Ciro-Flex twin lens reflex, f/3.5 lens, case. Price .. £38 6/-
- 9092—Voigtlander Brilliant focusing, f/4.5 lens, case. Price .. £18 10/-
- 9105—Ensign Ranger, f/6.3 lens, Trikon shutter (shop soiled) .. £13 10/-
- 8955—Retina I, 24 x 36mm., f/3.5 lens, case, £21 10/-
- 9075—Six-20 Kodak Duo, f/4.5 lens, Compur shutter, case .. £15
- 8679—Kodak 35, f/3.5 lens, Kodamatic shutter, £26
- 7223—Argus C11, f/3.5 lens, coupled rangefinder, case .. £31 15/-
- 8777—Voigtlander Vito II, Colour Skopar, f/3.5 lens, Compur-Rapid shutter .. £25
- 8980—Voigtlander Vito II, 24 x 36mm., Color Skopar f/3.5 lens, Compur-Rapid shutter, case. New condition .. £27
- 9039—Leica CII, Elmar f/3.5 lens, coupled rangefinder, case. New condition .. £89 10/-

LENSES

- 8668—Taylor Hobson Cooke portrait, 13in. focus f/5.6, in iris mount .. £15

KODAK STORE, 252 Collins Street, Melbourne

CAMERAS

- 8808—Rolleicord 2½ x 2½ reflex, Zeiss Triotar f/3.5 lens, Compur-Rapid shutter, always-ready case .. £28 10/-
- 8805—Kodak Vollenda, Anastigmat f/3.5 lens, speeds 1 to 1/300 sec., leather case .. £14 10/-
- 8751—Kodak 35, Anastigmat f/3.5 lens, coupled rangefinder, always-ready case .. £38 10/-
- 8780—V.P.K. Exakta, Tessar f/3.5 lens, speeds 1/25 to 1/500 sec., always-ready case, £19 10/-
- 8766—Retina I, Ektar f/3.5 lens, Compur-Rapid shutter, always-ready case .. £25
- 8758—2½ x 2½ Zeiss Ikonflex, Tessar f/2.8 lens, Compur-Rapid shutter, always-ready case, £79 10/-
- 8752—Leica IIIA, Summar f/2. lens, F.P. shutter, speeds, 1 to 1/1000 sec., always-ready case, £55
- 8743—Zeiss Contax, Mod. III, Biotar f/2 coated lens, built-in exposure meter, coupled rangefinder .. £95
- 8742—Certo Dollina, 24 x 36mm., Xenon f/2 lens, speeds 1 to 1/300 sec., always-ready case. Price .. £22 10/-

CINE

- 8813—Cine-Kodak Eight Model 20 Camera, f/1.9 lens, leather case .. £38 10/-
- 8811—Cinemaster 8mm. Camera, f/2.5 lens, 8 to 32 f.p.s., leather case .. £39 10/-
- 8810—Siemens 8mm. camera, f/2.2 lens, leather case. Price .. £28 10/-
- 8763—Kodascope 8mm. Model 44 projector, 200-watt lamp, 25mm., f/2 lens, leads, resistance. Price .. £42 10/-

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Kodablitz photography has unlimited possibilities—synchro-sunlight shots, improved shadow detail, action by night, colour indoors—thanks to the "sure-fire" efficiency of the Kodablitz Flash Gun. Its handy, light-weight metal and plastic body permits rapid and easy operation, while an ejector button quickly dispenses with the spent bulb. A connection is provided to accommodate a second flash gun. It uses A.S.C.C. flash bulbs and requires three 1.5-volt batteries.

It takes just a few seconds to attach a Kodablitz ready for flash shooting—load batteries into case, screw bracket to battery case, mount camera on bracket, connect cable to flash contact on camera, and insert flash bulb.

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